ARTISTIC ROOFING TILES

MANUFACTURED BY

THE CLEADON TERRA-COTTA CO. LTD.

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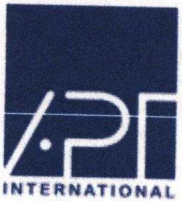

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CELADON ROOFING TILE CO.

The Celadon Terra-Cotta Co., Ltd.

Manufacturers of

Artistic Roofing Tiles

OFFICERS:

CHARLES T. HARRIS, President — HENRY S. HARRIS, Vice-President

WILL R. CLARKE, Secretary and Treasurer — EDWIN J. HESS, Assistant Secretary and Treasurer

NEW YORK — CHICAGO

ALVORD B CLARKE, General Superintendent

WORKS:

ALFRED, N. Y. OTTAWA, ILL.

NEW YORK OFFICE:
156 Fifth Avenue
Suite 1123-4 Presbyterian Building

CHICAGO OFFICE:
204 Dearborn Street
Suite 1001-2 Marquette Building

All inquiries as to patterns and prices should be addressed either to the New York office or to the Chicago office.

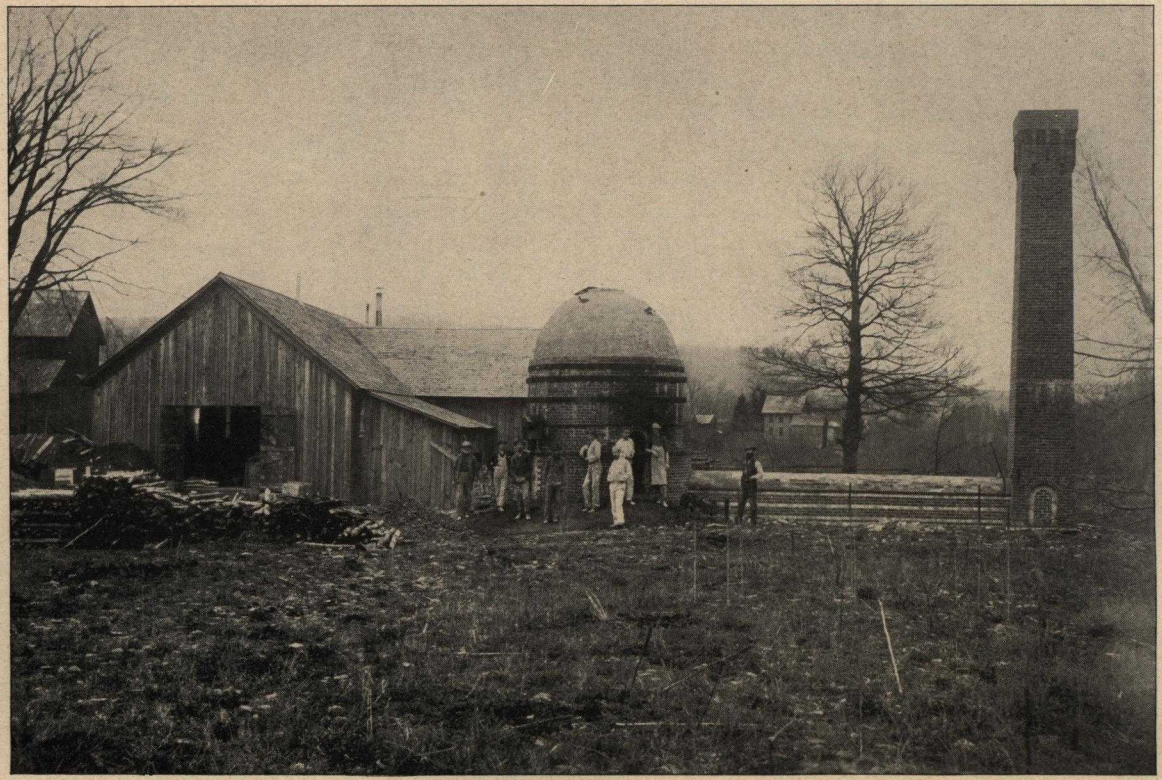
THE Celadon Terra Cotta Co. Ltd. is in the eleventh year of its history as a manufacturer of Roofing Tiles. Beginning in somewhat primitive fashion at Alfred, N. Y., its methods and equipment have been so far developed as to give its product first rank in this class of building material for mechanical accuracy, durability and artistic effect.

With the acquisition of a western plant at Ottawa, Ill., its position in the market was so strengthened as to give it unquestioned pre-eminence, not only in the character of the goods it manufactures, but also in facilities for promptly and satisfactorily supplying the trade in any portion of the country.

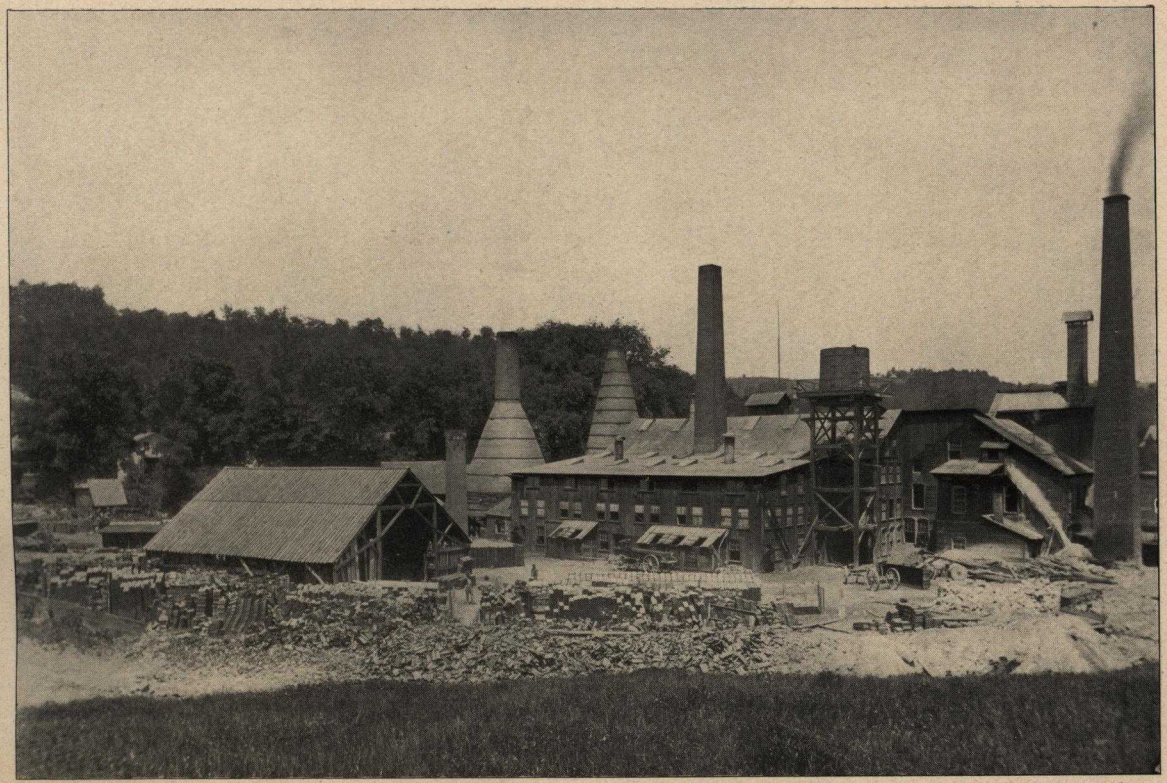
The Celadon Terra Cotta Co. Ltd. is committed to certain principles in offering its product to the market: First, it believes in making good goods and in the shipment only of such goods; Secondly, it believes that "good goods" in the application of that term to Roofing Tiles, means hard-burned tiles.

The texture of no Roofing Tile is absolutely dense and free from laminations when the tiles will absorb a great quantity of moisture. It is a new and remarkable paradox in the field of clay-working to hear the statement soberly advanced that porosity in burned clay is a virtue. Such assertion is made in the face of the fact that disintegration in clay ware never occurs in well-burned ware, but always occurs, when it does occur, in material that is freely absorbent.

By "hard burned" ware and "well burned" ware we mean ware submitted to that degree of heat which so fuses the ingredients of the material as to make perfect annealing possible. Those who make a virtue of necessity in the handling of clays which will not fully fuse and anneal without warping and twisting out of shape, may naturally assert that the clay which makes and can make only porous ware is as good raw material as the other, but the experience of clay workers for centuries, and nature herself, is against them. Cold and heat, freezing and thawing, rain and snow, sooner or later will justify this contention, and the soft-burned absorbent tiles will rot and crumble away. In those countries where tiles have been in place on buildings for hundreds of years, only the hard-burned tiles are used. If the soft tiles ever were used, they are not now on those old roofs and must have rotted into dust and been blown away.



WORKS AT ALFRED, N. Y. IN 1888.



WORKS AT ALFRED, N. Y. IN 1898.

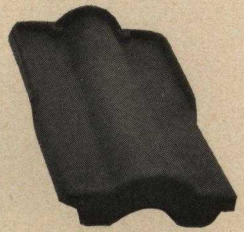
WORKS AT OTTAWA, ILL.

ROLL TILES

CONOSERA

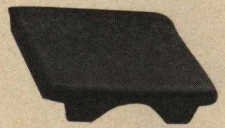
Our best known shape of roofing tile is the Conosera, so called from the fact that its mechanical construction is that of a half-cone truncated, or a conic section. The standard size of this pattern is 8 x 12 inches. We make the graduated sizes in this style from 8 inches in width to 2 inches wide. We also make, for roofs which will carry a bolder effect, a 10 x 15-inch Conosera tile.

Size of tile.....8 x 12 inches
Number in square..170 tiles
Weight of square....850 pounds



10 x 15 inches
100 tiles
1000 pounds

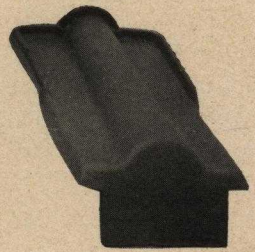
Short Tops ..8 x 12 inches
Dimensions..6 x 9 inches



10 x 15 inches
9 x 11 inches

Long Tops..8 x 12 inches
Dimensions 8½ x 12½ inches

10 x 15 inches
11 x 17 inches



Short and Long Eaves for 10 x 15 inch.
Similar Eaves are made for 8 x 12 inch.

CONOSERA

The illustrations herewith show the different sizes of these tiles required to cover a conical roof. We also show a figure representing these tiles as actually laid on a certain tower, illustrating the uniformity of lines of convergence and the perfect alignment.

2 x 12 inches

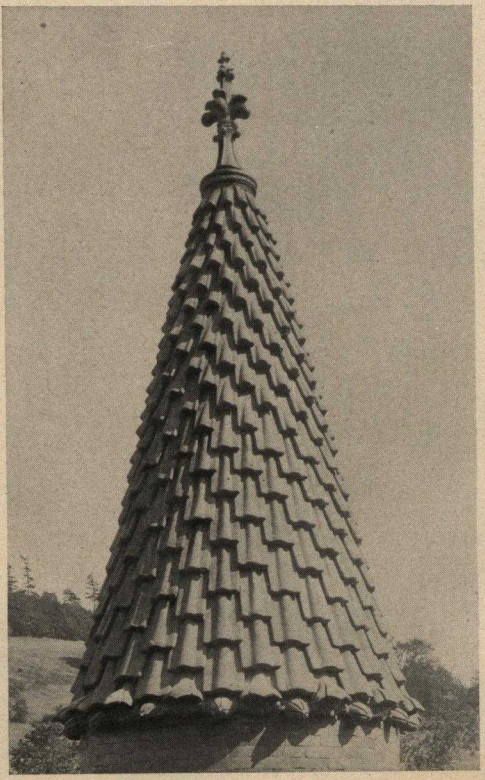
3 x 12 inches

4 x 12 inches

5 x 12 inches

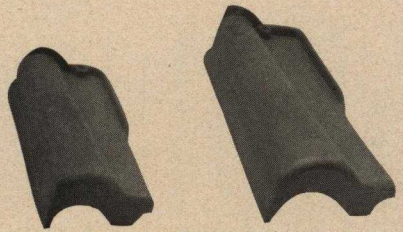
6 x 12 inches

Sizes.	No. in Sq.	Pounds per Sq.
3 x 12	600	1050
4 x 12	300	825
5 x 12	240	720
6 x 12	200	750



CONOSERA

Suction of snow and rain has been a serious obstacle to securing a satisfactory roof of tiles of the usual pattern, and to prevent such trouble much elastic cement has been used by roofers. In no parts of the roof has dependence on mortar and cement been more conspicuously misplaced than at the hips and valleys. The life of such material at the best is short, especially in the trying climatic conditions of northern latitudes. It is still a common custom for the roofers to cut all hip tile and all valley tile on the roof and close up the valleys with cement. Experience has made manifest that this is but temporary construction; that with the shrinkage of the cement and the penetration of the elements, the cement pops out, leaving the whole stretch of valley exposed to the weather and to the nesting swallows. The work thus done cannot but be ragged, uncertain and a makeshift.



Right Rake Tiles—8 and 10 in.

Cut Hip Tile

Closed Valley Tile

Several years ago we adopted the method of laying out the hips and valleys, so as to be able to cut all hip tile, and cut and close up all valley tile at the correct angles while the material is green, and burning these tiles afterward. Our methods are now so accurate that our cut hip tile and our closed valley tile fit into the particular roof for which they are made perfectly. Roofers never have any trouble with such material from our factories, and architects and owners secure by this method exact and permanent results. Our Conosera Tiles, with flat tops, closed eaves, cut hips and closed valleys make a perfect roof covering.

CONOSERA

The mechanical advantages of this pattern of tile are at once apparent. Their conception is due to the late George H. Babcock, famous in the mechanical and engineering world in connection with the development and perfection of the water-tube boiler, and is fully covered by patents under his name and now owned by us. The invention in question relates to roofing tile of approximately rectangular form, and the novelty consists in interlocking the tiles consecutively in vertical succession, composing series which lie in lines perpendicular, or substantially so, to the eave or the ridge of the roof, and then "breaking" or alternating joints between the adjacent series laterally, so that the members of each overlap at or about the middle of those adjacent. This invention also includes certain novel features of construction of the interlocking flanges used in carrying out the arrangement stated above, and forming tight joints for the exclusion of rain, snow, wind or dust, without the use of elastic cement, and reducing suction to a minimum.

Fig. 8.

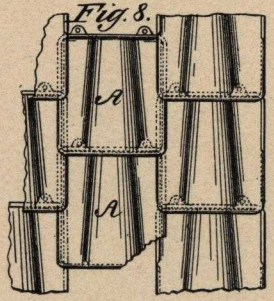


Fig. 9.

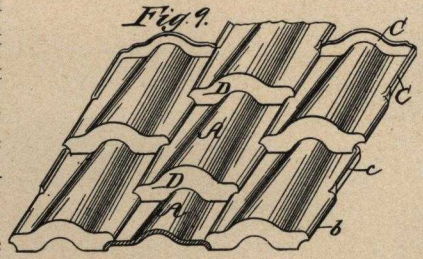
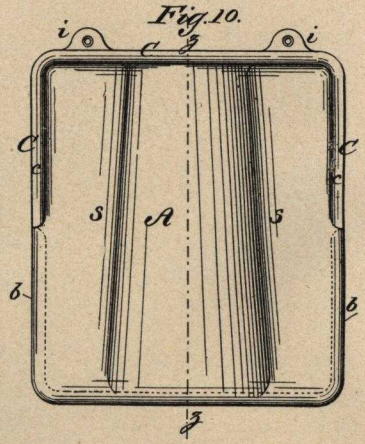


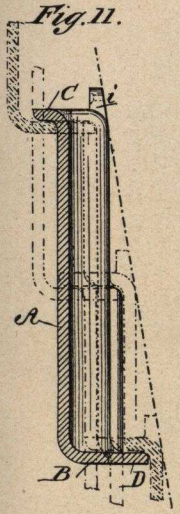
Fig. 10.



Hence this pattern of tile —the Conosera—is of approximately rectangular form, having a downward flange, or "lip", extending

about one-half its perimeter below its axial line, and an upward flange, or "lap", above its axial line extending the remainder of its perimeter, substantially as shown in the accompanying illustrations.

Fig. 11.



The downward flange below the axial line is adapted to overlap and interlock three adjacent tiles, and the upward flange above the axial line to interlock three other overlapping tiles. There is a downward flange at the lower end of this tile and an upward flange at the upper end; the downward flange at the lower end being deeper than the flanges on the other sides, this extension in depth compensating for the difference in distance or separation between the planes of adjacent tiles of common series and adjacent tiles of different series, enabling them to interlock in vertical as well as lateral succession.

Referring to accompanying illustrations, Fig. 8 is a plan view of several tiles arranged as they would be when laid upon a roof, showing the configuration of the tile and the method of interlocking. Fig. 9 is a perspective view of Fig 8. Fig. 10 is an enlarged plan view of a single tile similar to those comprising 8 and 9. Fig. 11, a section (zz) of Fig. 10, indicates the relative position of the adjacent interlocking tiles and their relative angle to the roof. Fig. 12 is an elevation of the lower end of Fig. 10, and Fig. 13 a side elevation thereof. The same mechanical advantages may be applied to a plain surface to secure tiles especially fit for sheathing purposes.

Fig. 12.

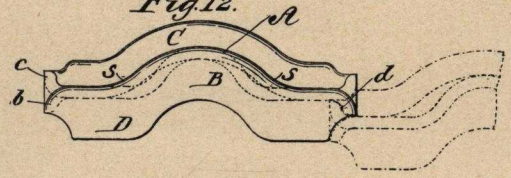
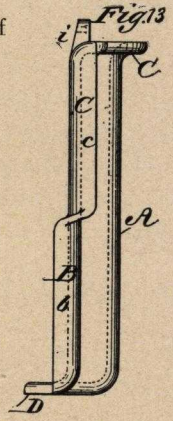


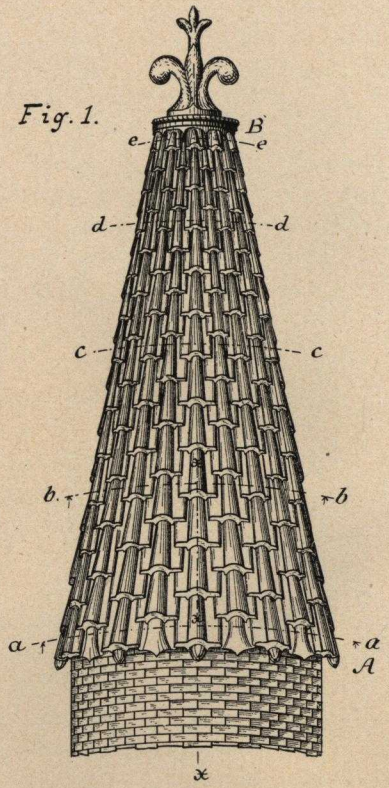
Fig. 13



CONOSERA.

The purpose of this invention, which is also covered by the Babcock patents, is to reduce to the minimum the number of different sizes of tiles required to cover a conical roof, and consists of a series of interlocking tiles, wherein the units or members are laterally adjustable upon one another, to embrace different circumferences in the conical roof, while preserving the number of tiles included in a circle and preserving their individual lateral dimension for a considerable number of tiers in the order of laying. The feature of lateral adjustability is adapted to preserve perfect uniformity of convergence in the lines of relief. Owing to the small number of different sized patterns required, economy is effected in molding and laying the tiles by reason of uniformity and infrequent change of selection. Heretofore it has been necessary, in order to preserve the converging alignment of the tiles upon a conical roof, to manufacture especially therefor as many different patterns of tile as there are tiers in the entire covering.

The invention described here is so adapted that whether the circular series composed of a given number of tiles has a maximum or a minimum circumference, the weather joints will be maintained. It will be obvious that what is stated with reference to tiling for conical roofs is applicable also to roofs having the form of conical segments.



Conosera

Referring to the accompanying drawings, in which similar characters of reference indicate corresponding parts in each view: Fig. 1 is a perspective elevation showing a tiled roof constructed according to this invention; Fig. 2, a horizontal section at *a*, *a*, Fig. 1; Fig. 3, a horizontal section at *b*, *b*, Fig. 1. Fig. 4 represents a vertical section enlarged, taken at *x*—*x*, Fig. 1; Fig. 5, a face view of a single tile of one dimension of pattern; Fig. 6, a face view of a single tile of another dimension of pattern; Fig. 7, a bottom end view of Fig. 5.

Fig. 2.

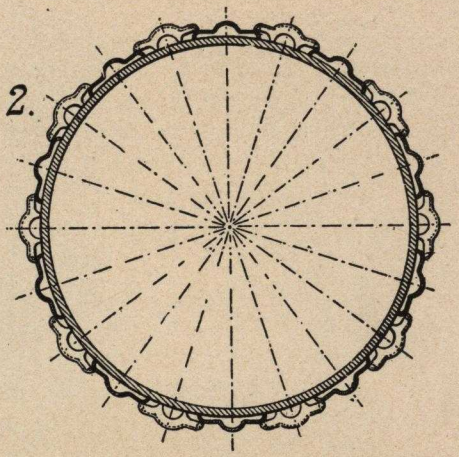
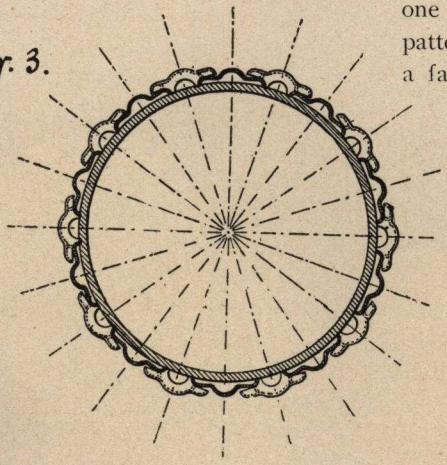


Fig. 3.



The invention thus described may be practiced with the use of various forms of tiles, but the form illustrated herewith is more especially adapted to carrying out this invention.

In Fig. 2, in which a series composed of a given number of tiles are assembled in a large circle, the joints on the surface *j*, are extended to the maximum, while in Fig. 3, wherein the same number of tiles of a similar dimension are assembled in a small circle, the

points upon the surfaces *j*, *j*, appear as contracted to the minimum; the cut-out parts *k*, *k*, Fig. 7, allowing of the range of adjustments. By means of such adjustability in the weather joints a dimension of pattern such as indicated in Fig. 5, for instance, may be used for several tiers upon the conical roof, shown in Fig. 1, commencing at the level *a*, *a*, until a considerably higher level, say at *b*, *b*, is reached, when the next dimension of tile of marked difference, as in Fig. 6, is used is laying from *b*, *b*, to *c*, *c*, *d*, *d*, and *e*, *e*, without affecting the uniform convergence in the vertical alignment of the tiles as they appear in Fig. 1, when the roof is completed.

Fig. 6.

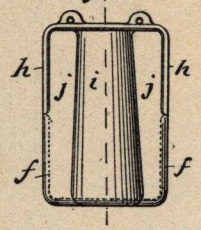
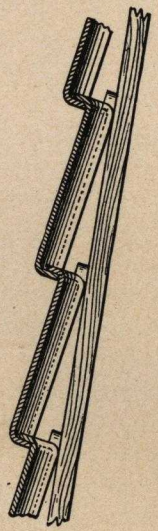
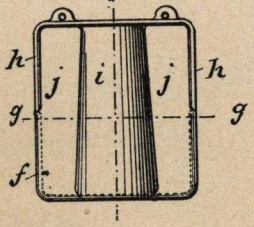


Fig. 4.



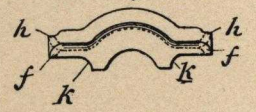
According to the extent of lateral adjustability provided in the design of tile adopted, a less or greater number of different sizes may be used to fill the roof. The minimum contraction in the laterally adjustable joints of the dimension of tile represented in Fig. 5, is equal in fitting capacity to the mamaximum of expansion in the laterally adjustable joints of the next dimension of tile, in Fig. 6, in the order of laying.

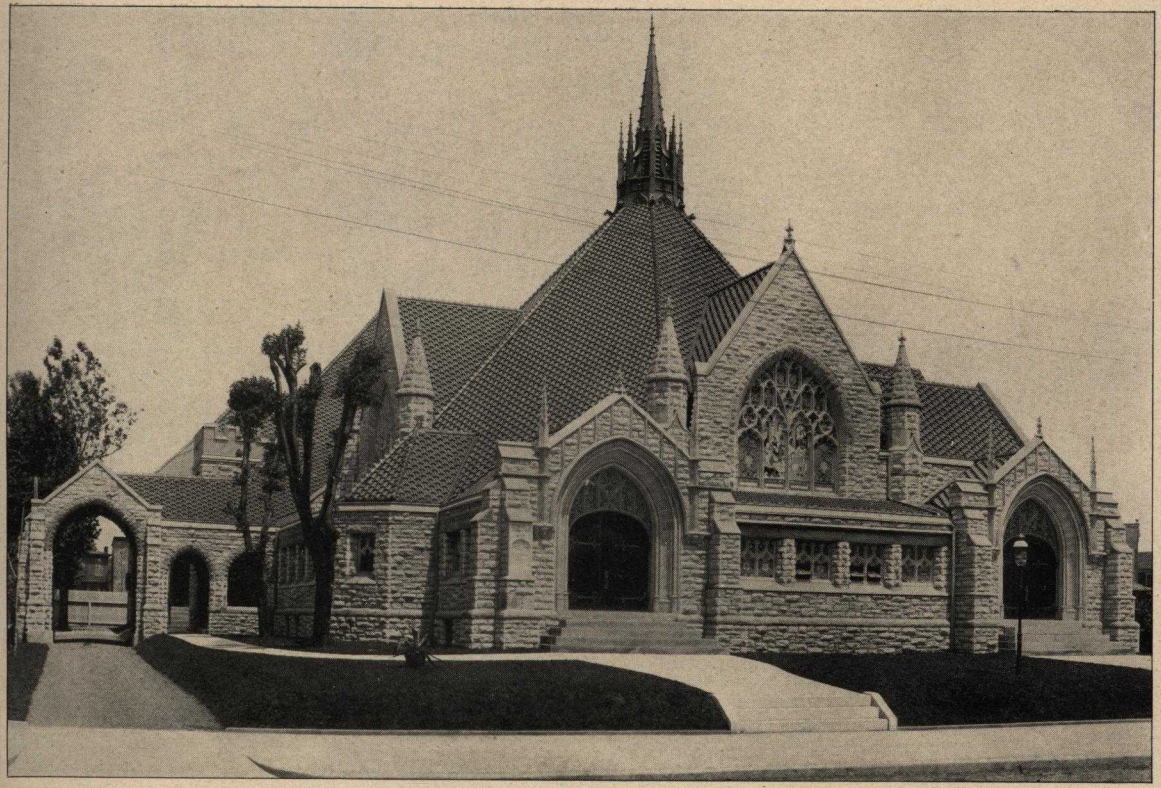
Fig. 5.



When two or more vertical series of tiles are placed together, as in Fig. 1, so that the tiles of one series overlap at or about the middle of the lengths of the adjacent series, the planes of the interlocking edges of the one series lie intermediate to the planes of the interlocking edges of the next; the range of adjustment in the movable joints being limited only by the form, or possibly the entire width, of the tile, should the same have a flat surface.

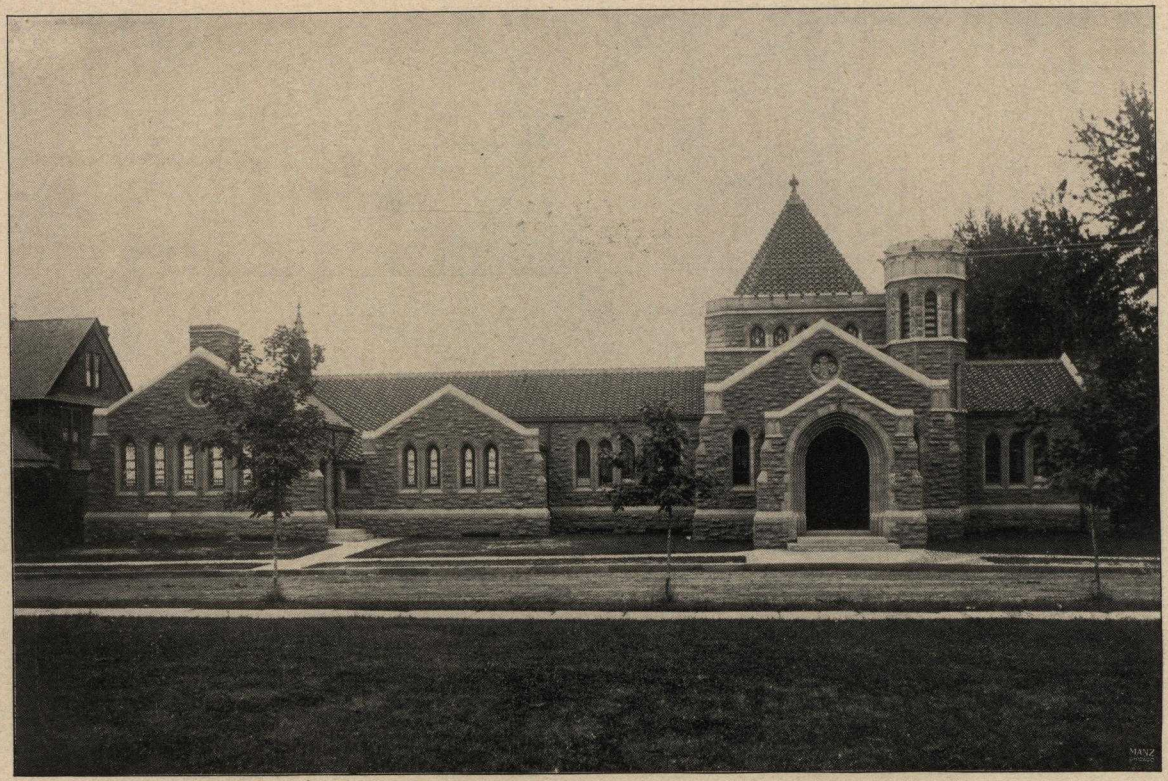
Fig. 7.





THIRD PRESBYTERIAN CHURCH, CHESTER, PA.
8-inch Conosera

Isaac Pursell, Philadelphia
Architect



PULLMAN MEMORIAL CHURCH, ALBION, N Y.
8-inch and 4-inch Conosera in Combination

S. S. Beman, Chicago
Architect

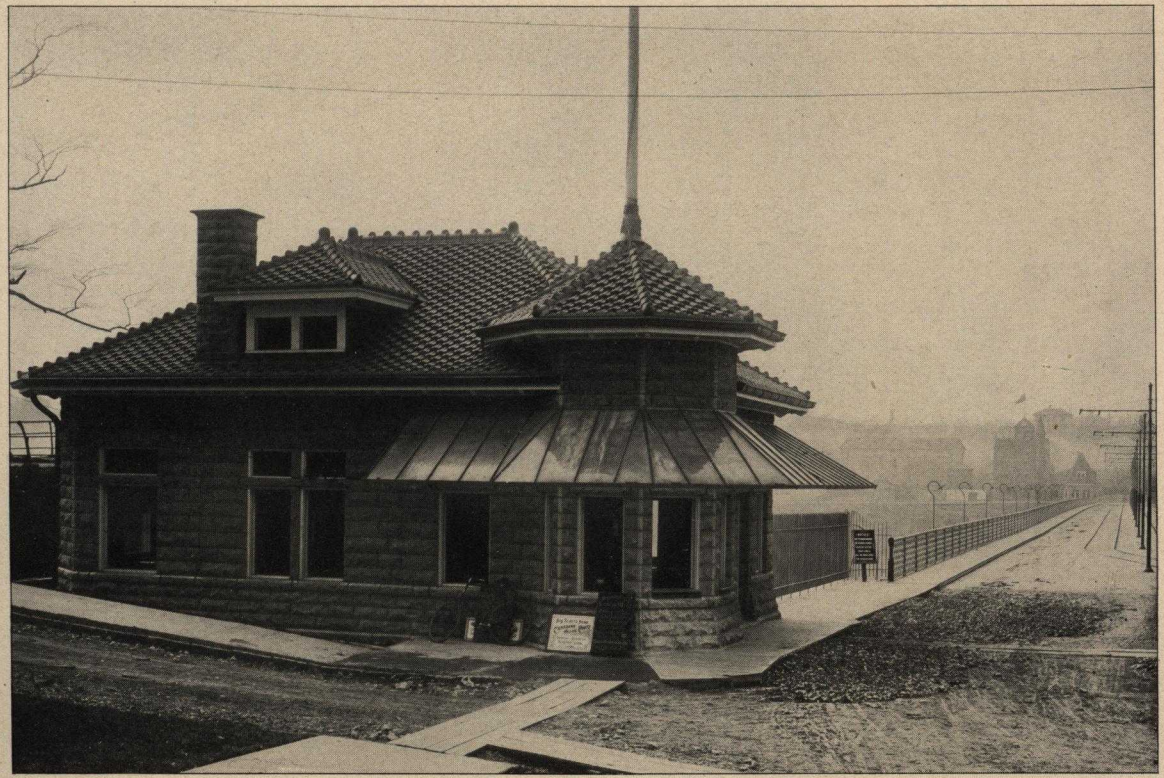
M. E. CHURCH, WINONA, MINN.
8-inch Conosera and Tower Tile

L. B. Wheeler and Craig McClure,
St. Louis, Architects

OFFICE INTERNATIONAL SUSPENSION BRIDGE CO., CANADA SIDE NIAGARA FALLS

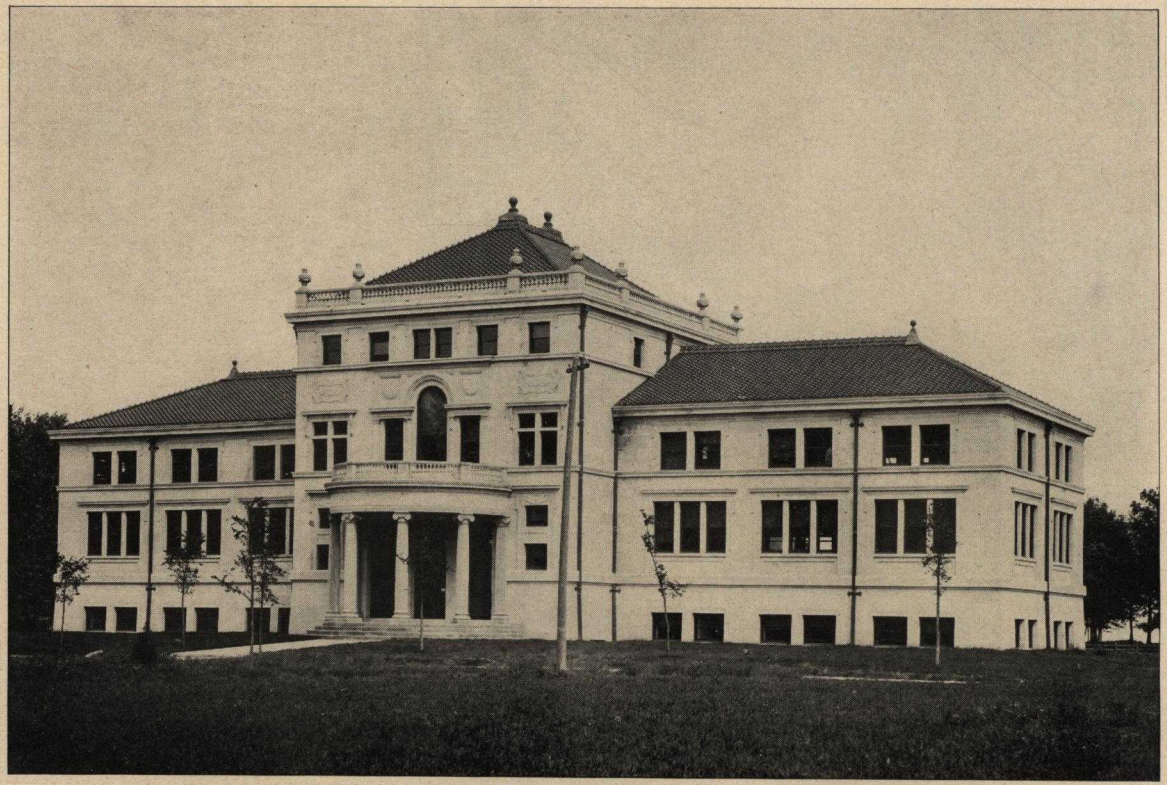
8-inch Conosera

R. A. Wallace, Buffalo,
Architect



OFFICE INTERNATIONAL SUSPENSION BRIDGE CO., AMERICAN SIDE NIAGARA FALLS
6-inch Conosera

R. A. Wallace, Buffalo,
Architect



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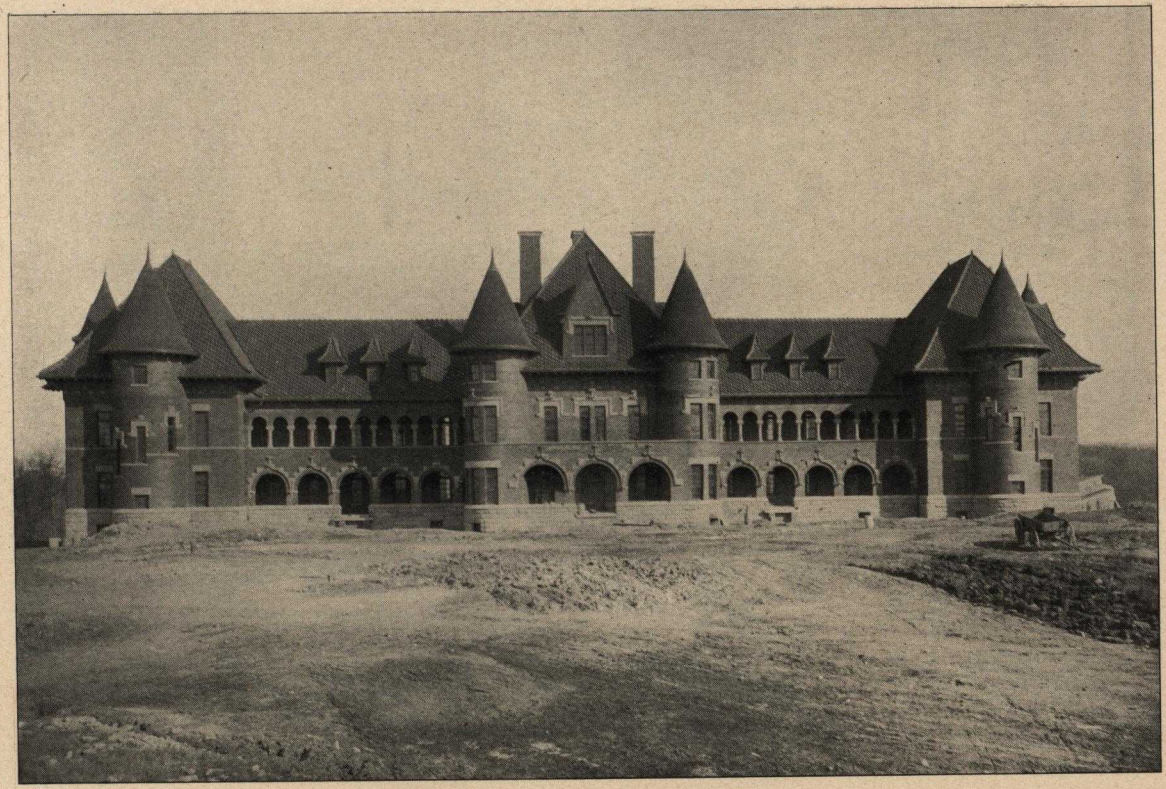
8-inch and 4-inch Conosera in Combination

W. A. Otis, Chicago
Architect



EASTERN OHIO HOSPITAL FOR INSANE, MASSILLON, OHIO
10-inch Conosera

Yost & Packard, Columbus, Ohio
Architects

BAND STAND, DELAWARE PARK, BUFFALO, N. Y.

8-inch and 2-inch Conosera in combination

Loverin & Whelan, Buffalo
Architects

Buildings Covered with Our Standard Conosera Tiles

BUILDING	OWNER AND LOCATION	ARCHITECTS
High School	City of Harrisburg, Pa.	J. C. Smith, Harrisburg, Pa.
Residence	A. T. Brown, Syracuse, N. Y.	Gordon A. Wright, Syracuse
Residence	H. L. Wardwell, Richfield Springs, N. Y.	G. P. Chappel, New York
Seminary	Lancaster Seminary, Pa.	J. C. Smith, Harrisburg, Pa.
Office Building	Mutual Life Insurance Bldg.	Clinton & Russell, New York
Office Building	Babcock Block, Plainfield, N. J.	O. S. Teale, New York
Library	Westerly, R. I., Memorial	Longstaff & Hurd, Bridgeport
Shelter Building	Public Park, Boston	
Residence	Anson Phelps Stokes, Lenox	H. N. Wilson, Pittsfield, Mass.
College	Agricultural Bldg., Cornell University	C. F. Osborne, Ithaca, N. Y.
Residence	A. B. Gardiner, Dowagiac, Mich.	W. K. Johnston, Chicago
Church	Lafayette St. Presbyterian, Buffalo	Lansing & Bierl
R. R. Station	C. A. & St. L., Springfield, Ill.	S. S. Beman, Chicago, Ill.
Residence	G. A. Gardner, Monument Beach, Mass.	W. A. Sears, Boston
Residences (10)	J. Gibson, Philadelphia, Pa.	H. E. Flower, Philadelphia
Residence	Mrs. Champlain, 4342 Drexel Boul., Chicago	H. H. Richards, Chicago
Hotel Walton	Goelet Estate, Philadelphia	A. S. Wade, Philadelphia
Church	3d Presbyterian, Chester, Pa.	Isaac Pursell, Philadelphia
School	High School, Kingston, Pa.	F. L. Olds, Wilkesbarre, Pa.
Church	First M. E., Winona, Minn.	L. B. Wheeler and Craig McClure, St. Louis, Mo.
Church	Trinity Memorial, Binghamton, N. Y.	Lacey & Barto, Binghamton
Church	Grace Church, Kansas City	F. E. Hill, Kansas City
R. R. Station	T. & O. C. Ry., Columbus, Ohio	Yost & Packard, Columbus
Residence	C. M. Kimbrough, Muncie, Ind.	Louis H. Gibson, Indianapolis
Hospital	Isolation, City of Chicago	Bruce Watson and D. E. Waid, Chicago
Library	Munson Williams Memorial, Utica, N. Y.	Richard H. Hunt, New York
Residence and Stable	J. Freiberg, Cincinnati, Ohio	S. S. Godley, Cincinnati
Residence	Thos. Ullam, Pittsburg, Pa.	S. T. McClaren, Pittsburg
Residence	W. D. Hollis, Sunnyside Ave., Chicago	W. F. Pagels, Chicago
Apartment House	D. O. Macquarrie, Sheridan Road, Chicago	A. F. Hussander, Chicago
Boat House	Lincoln Park, Chicago	J. C. Llewellyn, Chicago
Office Building	Scottish Rite Temple, Indianapolis	W. Scott Moore, Indianapolis

BUILDING	OWNER AND LOCATION	ARCHITECTS
Residence	E. H. McCaleb, Jr., New Orleans, La.	Dinwiddie & Newberry, Chicago
R. R. Station	Erie Ry. Co., Cuba, N. Y.	G. E. Archer, New York
Residence	A. Hoffman, No. 5046 Michigan Ave., Chicago	Murphy & Camp, Chicago
Residence	No. 4-10, 72d Street and Boulevard, New York	C. H. P. Gilbert, New York
Residence	T. Fluhart, Dayton, Ohio	Williams & Andrews, Dayton, Ohio
Residence and Stable	J. W. Kauffman, Park Entrance, St. Louis	Link & Rosenheim, St. Louis
Station	Electric Light and Power Sta., Garfield Park, Chicago	J. L. Silsbee, Chicago
Library	Public, Kansas City, Mo.	Hackney & Smith, Kansas City
Residence	D. J. Hubbard, 6520 Harvard Ave., Chicago	J. T. Long, Chicago
Residences (2)	G. Willard-Dr. T. J. Balhatchet, 53d St., Chicago	Postle Bros., Chicago
Church	Holy Angels, Oakwood Boulevard, Chicago	J. J. Egan, Chicago
Station	Erie Ry. Co., Middletown, N. Y.	G. E. Archer, New York
College Library	University of Illinois, Urbana, Ill.	Ricker & White. Urbana, Ill.
Residence	Charles L. Kurtz, Columbus, Ohio	Yost & Packard, Columbus, Ohio
Residence	Mrs. Anna Dayton, Hampden Court, Chicago	Guenzel & Hibbard, Chicago
Residence	E. S. Jensen, Wabash Ave., Chicago	E. S. Jensen, Chicago
Hospital	St. Margarets, Pittsburg, Pa.	Ernest Flagg, New York
Residence	P. Kleeburg, New York	C. H. P. Gilbert, New York
Residence	G. W. Fairchilds, Oneonta, N. Y.	
R. R. Station	Erie Ry., Ruthford, N. J.	Geo. E. Archer, New York
Mortuary Chapel	Williansport, Pa.	D. K. Dean, Williamsport
Residence	H. C. McCormick, Williamsport, Pa.	T. P. Pritmeyer, Williamsport
Residence	T. B. Crary, Binghamton, N. Y.	Alfred Bartoo, Binghamton
Residence and Stable	N. W. Bowen, Delphi, Ind.	Frank H. Woolever, Lafayette, Ind.
Residence and Stable	Mrs. Armour, Kansas City, Mo.	F. E. Hill, Kansas City
Residence	W. H. Lawrence, Dover Bay, Ohio	F. S. Barnum & Co., Cleveland
Y. M. C. A. Building	Mansfield, Ohio	Vernon Redding, Mansfield, Ohio
Residence	Mr Guernsey, Chicago, Ill.	Geo. L. Harvey,
Residence	Mr. Chandler, Cleveland, Ohio	A. N. Oviatt, Cleveland
Suspension Bridge Office	Canada Side Niagara Falls	R. A. Wallace, Buffalo
Residences	Union Mutual Life Insurance Co., Chicago	S. S. Beman, Chicago
Freight House	M. & O. Ry., Montgomery, Ala.	Cook & Lauvie, Montgomery
Residence	Geo. T. Dickover, Wilkesbarre, Pa.	J. H. W. Hawkins, Wilkesbarre, Pa.
Residence	J. W. Kaufman, Columbus, Ohio	Yost & Packard, Columbus
Residence	Geo. Crilly, Woodlawn Ave., Chicago	W. C. Zimmerman, Chicago

BUILDING	OWNER AND LOCATION	ARCHITECTS
Residence	C. L. Poston, Athens, Ohio	Yost & Packard, Columbus
Library Mem. Annex	Westerly, R. I.	Longstaff & Longstaff, Bridgeport, Conn.
Somerset Apartment House	Boston, Mass.	A. H. Bowditch, Boston Mass.
Residence	E. A. Swisher, Columbus, Ohio	C. A. Stribling & Co., Columbus
Residence	J. W. Mitchell, Columbus, Ohio	Yost & Packard, Columbus
Residence	Mrs. Norton, Chicago	John R. Stone, Chicago
Residence	Capt. Wm. Johnson, Chicago	Hessenmueller & Meldahl, Chicago
Fire House	Ogden Ave., New York	Percy Griffin, New York
Residence	Wm. Henderson, Chicago	W. T. Branitzky, Chicago
Residence	Thos. Cressey, Newark, N. J.	Thos. Cressey, Newark, N. J.
Public School	West Pittstown, Pa.	
Residence	C. E. Martin & Bro., Mansfield, Ohio	Yost & Packard, Columbus
S. D. B. Parsonage	Alfred Station, N. Y.	C. C. Chipman, New York
Residence	E. B. Harvey, Buffalo, N. Y.	Martin C. Miller, Buffalo
Residence	Jos. Elsinger, St. Paul, Minn.	Clarence Johnston, St. Paul
Church, Episcopal	LaCrosse, Wis.	Detweiler & Resticeux, Columbus, Ohio
Residence	E. J. Bein, Newark, N. J.	Henry Baechlin, Newark, N. J.

BUILDINGS WITH 10 x 15-INCH CONOSERA

Public Building	City of Yonkers, Yonkers, N. Y.	
Roman Catholic Protectory	Fatland, Pa.	Wilson Bros. & Co., Philadelphia
R. R. Station	Erie Ry., Jamestown, N. Y.	G. E. Archer, New York
Biological Building	Columbus, Ohio	Yost & Packard, Columbus
Church of Our Lady of Mercy	Philadelphia, Pa.	Edwin F. Durang, Philadelphia
R. R. Station	Erie Ry., Paterson, N. J.	G. E. Archer, New York
Orphans' Home	Odd Fellows, Springfield, O.	Yost & Packard, Columbus
Science Hall	Syracuse University, Syracuse, N. Y.	E. H. Goggin, Syracuse, N. Y.
R. R. Station	Union Ry. Co., Des Moines, Ia,	George E. Hallett, Des Moines, Ia.
Episcopal Church	Ambler, Pa.	
Public School	Winnetka, Ill.	W. A. Otis, Chicago
R. R. Station	C., R. I. & P. Ry., Atlantic, Ia.	W. K. McFarlin, Chicago
Engine House	Boston, Mass.	Perkins & Betton, Boston
Church, Francis Xavier Parish	Black Rock, N. Y.	C. Schmill, Buffalo, N. Y.
Revere Beach Bath House	Revere, Mass.	Stickney & Austin, Boston
First Presbyterian Church	Ft. Smith, Ark.	H. I. Goddard, Fort Smith

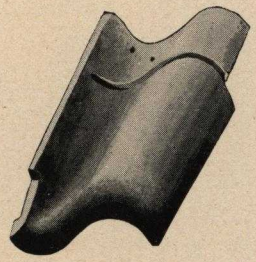
BUILDING	OWNER AND LOCATION		ARCHITECTS
Residence	J. D. Sawyer, Sound Beach, Conn.		E. E. Holman, Philadelphia
Residence	Supt. State Hospital, Massillon, O.		Yost & Packard, Columbus
School, Fourth Ward	Niagara Falls, N. Y.		Orchard & Joraleman, Niagara Falls, N. Y.
Pumping Station	Stoneham, Boston, Mass.		Shepley, Rutan & Coolidge, Boston
Police Station	Revere Beach, Revere, Mass.		Stickney & Austin, Boston
Beaconsfield Terrace	H. M. Whitney, Brookline, Mass.		
Church	Our Lady of Sorrows, Chicago		John R. Pope, Chicago
Apartment	Chicago		John R. Stone, Chicago
High School	Dobbs Ferry, N. Y.		C. Powell Karr, New York
City Hall	City of Elmira, N. Y.		Pierce & Bickford, Elmira
Court House, Lackawanna, Co.	Scranton, Pa.		T. I. Lacey & Son, Scranton
Bank	First National, East Orange, N. J.		Ludlow & Valentine, New York
R. R. Station	Union Ry., Columbus, Ohio		D. H. Burnham & Co., Chicago
Asylum, East Ohio Insane	Massillon, Ohio		Yost & Packard, Columbus
Office Building	The Holland, St. Louis, Mo.		Craig McClure, St. Louis
Municipal Court Building	City of Yonkers, Yonkers, N. Y.		
Sanitarium	Phelps S. & M., Sanitarium, Battle Creek, Mich.		R. T. Newberry, Chicago
High School	Evanston, Ill.		Charles R. Ayars, Evanston

BUILDINGS WITH CONOSERA IN COMBINATION

Kings Park Hospital	Kings Park, L. I.	8 and 10-inch	J. W. Perry, Albany, N. Y.
Townsend Mem'l Hall	Ohio University, Columbus, Ohio	6 and 8-inch	Peters, Brown & Pretzinger, Dayton, Ohio
Residence	E. T. Affleck, Columbus, Ohio	2, 6 and 8-inch	Yost & Packard, Columbus
Band Stand	Delaware Park, Buffalo,	2 and 8 inch	Loverin & Whalen, Buffalo
School	Intl. Corres. School, Scranton, Pa.	2 and 8-inch	W. Scott Collins, Scranton
Church	Pullman Memorial, Albion, N. Y.	4 and 8-inch	S. S. Beman, Chicago
Library	Orrington Lunt N. W. Univ., Evanston	4 and 8-inch	W. A. Otis, Chicago
Church	S. D. B. Church, Plainfield, N. J.	8-inch and tower	O. S. Teale, N. Y.
Gate Towers	Water Works, Minneapolis,	graduated	F. W. Coppelin, City Engineer
Residence	P. Sanford Ross, Newark, N. J.	6-inch	H. E. Reeve, Newark, N. J.
Residence	A. Houghton, Jr., Corning, N. Y.	6-inch	Pierce & Bickford, Elmira, N. Y.
Suspension Bridge	American Side Niaraga Falls, N. Y.	6-inch	R. A. Wallace, Buffalo, N. Y.
Office Building	Dr. C. M. Taylor, Columbus, Ohio	6-inch	Wilber T. Miles, Columbus
Apartment	Lincoln Park Palace, Chicago	4-inch	E. Hill Turnock, Chicago

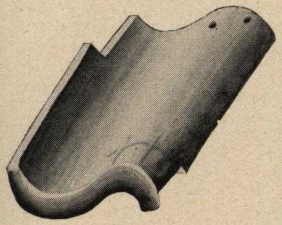
Inter Ocean

These tiles when laid on the roof, strongly resemble the larger sizes of the Spanish roll tiles, with their strong vertical and somewhat accentuated horizontal lines. They are especially recommended for use where such alignment is desired, with bold effects in the roll. They give opportunity for a pronounced play of lights and shadows, and have this marked advantage over any of the ordinary Spanish tiles, that they securely interlock. The depth at the tail and the water-break at the top make them tight fitting and weather-proof without the use of cement. The tiles themselves make a weather-proof roof. The pattern is made in one piece, being a combination of an obverse and inverse semi-cone, with tapering ends. One tile snugly locks with three other tiles, reducing suction to a minimum and, by the system of joining, counteracting capillary attraction.

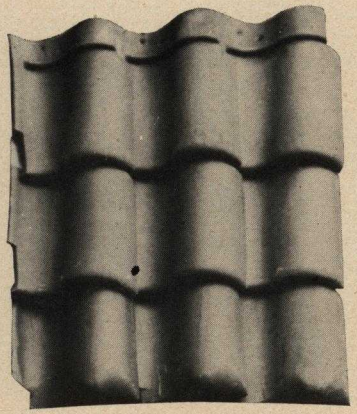


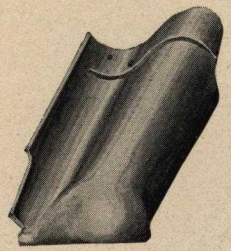
Obverse

Size of tiles .....9 x 12 inches
Number in square.....200 pieces
Exposure to weather.8 x 9 inches
Weight per square...1000 pounds



Reverse





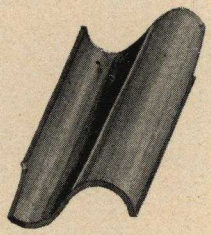
Eave

Spanish

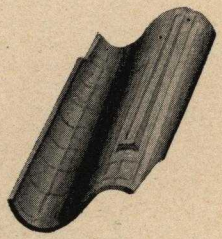
The form of tile shown on this page is the improved or modern Spanish tile, made in one piece—a combination of an obverse and an inverse semi-cone. We make this shape of tile in two sizes, both of which are designed to be nailed on sheathing, and also make the graduated size for circular towers.

PATTERN A.

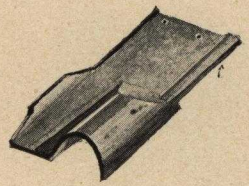
Size	9 x 12 inches
Exposure	.8 x 9 inches
Number in square	200 tiles
Weight per "	775 pounds



Obverse

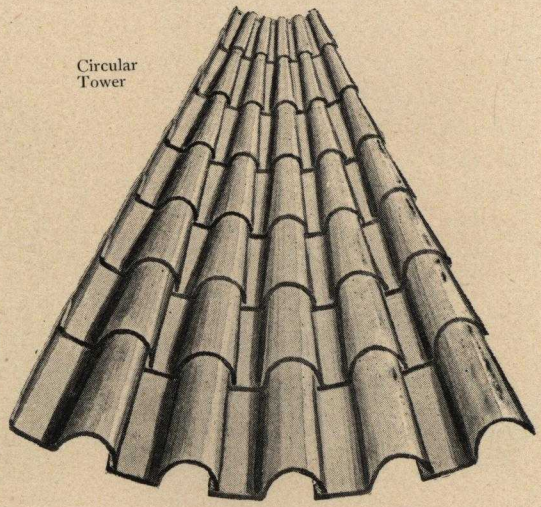


Reverse



Top Tile

Circular Tower



PATTERN B.

Size of Tile	6¾ x 10¼ inches
Exposure	5⅛ x 8⅜ inches
Number in square	280 tiles
Weight per "	800 pounds

GATE HOUSE, GRACELAND CEMETERY, CHICAGO
Spanish A

Holabird & Roche, Chicago
Architects

SOPHIA NEWCOMBE MEMORIAL CHAPEL, NEW ORLEANS, LA.
Spanish B

Wilson Eyre, Philadelphia
Architect

Buildings Covered with Our Spanish Tiles

SPANISH A

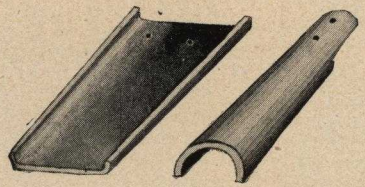
BUILDING	OWNER AND LOCATION	ARCHITECTS
Double Residence	E. E. Hill, Chicago	A. W. Cole, Chicago
Residence	Union Mutual Life Ins. Co.	S. S. Beman, Chicago
Depot Building	K. C. P. & G. R. R., Shreveport, La.	
Union Depot	Jacksonville, Fla.	
Entrance Gates	Graceland Cemetery, Chicago	Holabird & Roche, Chicago
Memorial Building	Wabash, Ind.	
Power House	Water Works Co., Indianapolis, Ind.	
Residence	Mr. Taylor, Huntington, Ind.	
Public Library	Redlands, Cal.	T. R. Griffith, Redlands
Depot Building	K. C. P. & G. R. R., Port Arthur	George Mathews, Kansas City, Mo.
Vance Memorial Church	Leatherwood, W. Va.	Franzheim & Co., Wheeling, W. Va.
Residence	San Francisco, Cal.	R. H. Hunt, New York

SPANISH B

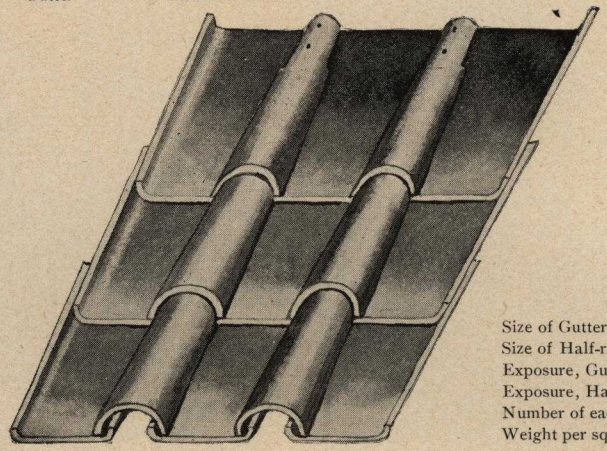
Residence	Douglas Boulevard, Chicago	
Pumping Station	Kensington, Chicago	Bruce Watson, Chicago
Sophie Newcomb Memorial Chapel	New Orleans	Wilson Eyre, Philadelphia
Residence	Edgewater, Chicago	Geo. W. Maher, Chicago
Residence	Judge Dooley, Chicago	
Residence	J. S. Runnells, Chicago	S. S. Beman, Chicago
Postal Station	39th and Cottage Grove, Chicago	Healey & Gilbert, Chicago
Residence	L. S. Steiger, Chicago	W. H. Smith, Chicago
Residences (2)	Union Mutual Life Insurance Co., Chicago	S. S. Beman, Chicago
Residence and Stable	Ed. Raesnow, Chicago	Burtar & Gassman, Chicago
Residences (2)	E. E. Pike, Beverly Hill, Ill.	H. H. Waterman, Chicago
Residence	H. S. Dooley, Bloomington, Ill.	A. Pillsbury, Bloomington, Ill.
Residence	C. J. Sherman, Sullivan, Ind.	
Residence	M. W. Simmons, Plymouth, Ind.	F. W. Allen, Joliet, Ill.
Residence	C. N. Payne, Titusville, Pa.	C. W. Terry, Titusville
Public Building	Melrose Junction	
Residence and Barn	Mr. Long, Minneapolis, Minn.	Long & Keyes, Minneapolis, Minn.
Residence	W. Frier, Detroit, Mich.	Mason & Rice, Detroit, Mich.
Residence	L. H. Withey, Grand Rapids, Mich.	Wm. Williamson, Grand Rapids, Mich.

Old Roman

This tile is made in two parts, a "Gutter" and a "Half-round".



Gutter Half-round

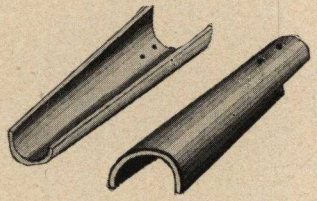


Size of Gutter .....8 x 12 inches
Size of Half-round .....4 x 12 inches
Exposure, Gutter..... .7 x 9 inches
Exposure, Half-round ..3 x 9 inches
Number of each in square ...160 tiles
Weight per square..... .1,200 pounds

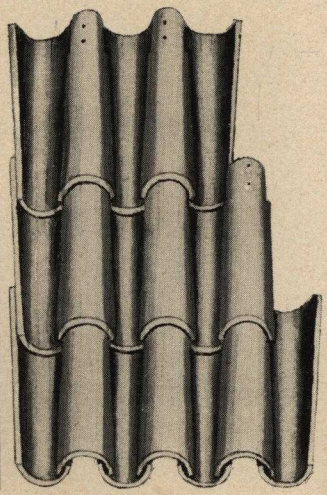
Old Spanish

This tile is made in two parts, both rolls—a concave and a convex.

Size of Concave ..... .4 x 12 inches
Size of Convex..... ....4 x 12 inches
Exposure Concave ..... 2 x 9 inches
Exposure Convex ..... 3 x 9 inches
Number of each in square..... 320 tiles
Weight per square.....1,920 pounds



Concave Convex



INTERLOCKING TILES

German and French

We make these tiles so as to nail on sheathing, or with ribs, so as to hang on purlines. In the latter case they are fastened with wire, one in four, to the purline. For closed construction, roofing paper is laid on the sheathing and secured in place by plasterer's laths laid vertically, 24 inches apart. On these are laid the wooden purlines, usually 1 x 2-inch strips.

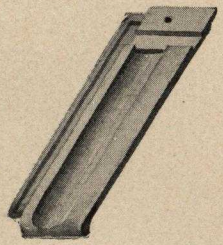
Size of Tile.....9 x 16 inches
Number in square.....133 tiles
Weight per square...770 pounds

NEW GERMAN

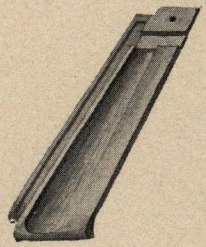
FRENCH A

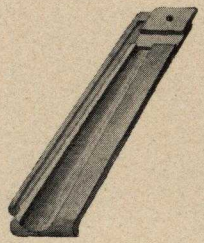
Size of Tile.....9 x 16 inches
Number in square....144 pieces
Weight per square...900 pounds
Exposure.....8 x 12½ inches

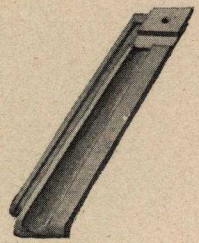
Face of Tile



Half Tile



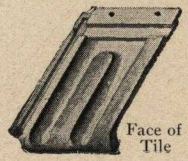




Circular Tower Tiles

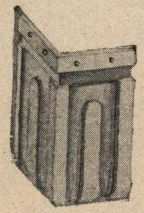
FRENCH B

Size of Tile.....6⅜ x 10¼ inches
Number in square.....285 pieces
Weight per square.....800 pounds
Exposure.....5⅞ x 8¾ inches



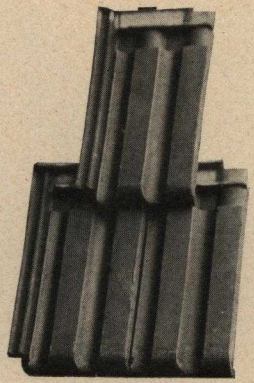
Face of Tile

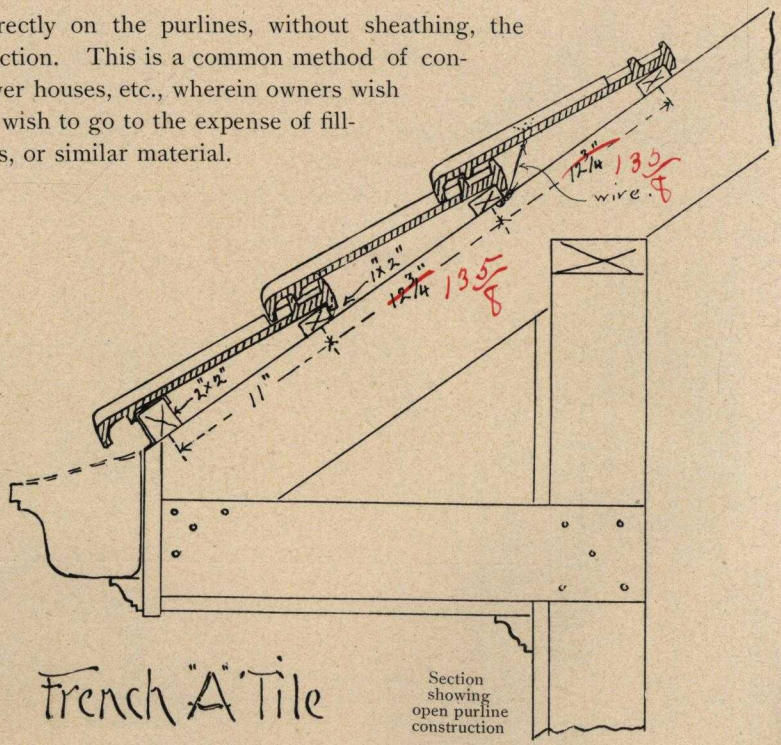
Mitred Tile for Dormer and Bay Windows.



French

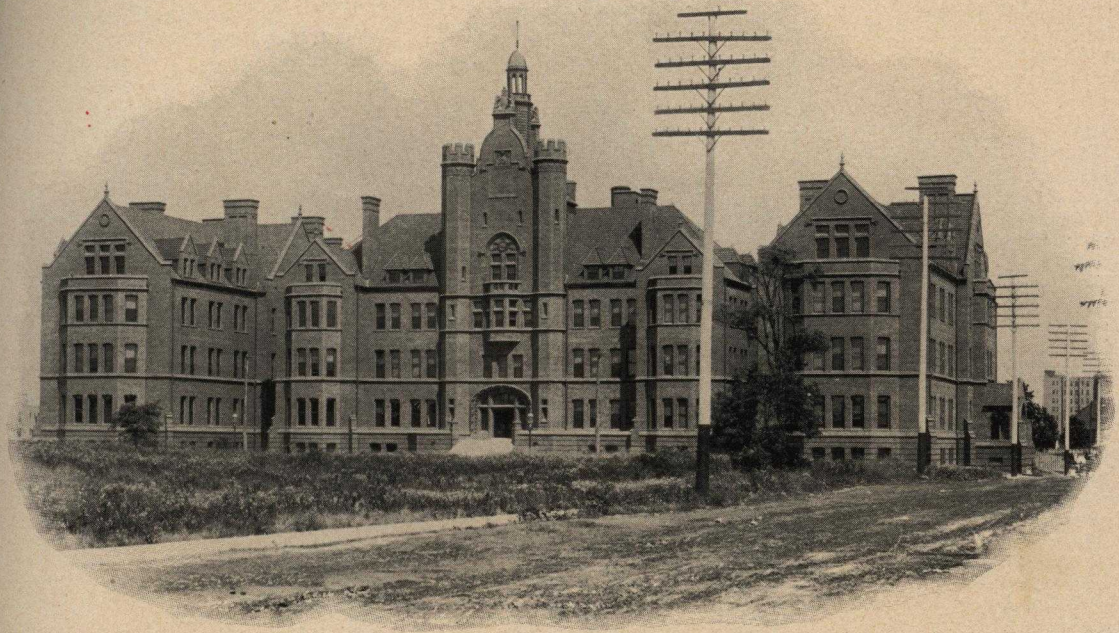
When the tiles are laid directly on the purlines, without sheathing, the method is known as open construction. This is a common method of construction in factory buildings, power houses, etc., wherein owners wish fire-proof construction but do not wish to go to the expense of filling up the purlines with book tiles, or similar material.





French "A" Tile

Section showing open purline construction



HOME FOR THE FRIENDLESS, CHICAGO
French B

Charles S. Frost, Chicago
Architect

Buildings Covered with Interlocking Tiles

NEW GERMAN

BUILDING	OWNER AND LOCATION	ARCHITECTS
Foundry	Moline Plow Works, Moline, Ill.	W. L. Paul, Moline, Ill.
Laclede Gas Light & Coke Co.	St. Louis, Mo.	W. Morava, Chicago

FRENCH A

Soldiers' Widows' Home	Wilmington, Ill.	R. T. Newberry, Chicago
Union Depot	Omaha, Neb.	Frost & Granger, Chicago
Residence	Van Wert, Ohio	Wing & Mahurin, Ft. Wayne, Ind.
Church of the Sacred Heart	Ft. Madison, Iowa	F. Heer, Dubuque, Iowa
Jircka School	City of Chicago	Normand S. Patton, Chicago
House and Barn	A. S. White, Chicago	
Residences	C. A. Birney, Chicago	Church & Jobson, Chicago
Cafe	Fifty-first and Grand Boulevard, Chicago	J. F. & J. P. Doerr
Apartment Building	E. H. Salsbury, Chicago	Wilson & Marshall
Carter Harrison Crib	Chicago	City Engineer
Carter Harrison Crib	Chicago (Glass)	City Engineer
Woodmen's Building	Rock Island, Ill.	Drack & Kearn, Rock Island

FRENCH B

Residence	S. A. Spry, Chicago	Huehl & Schmid, Chicago
Residence	W. G. Oliver, Chicago	Geo. Maher, Chicago
Residences (2)	Union Mutual Life Ins. Co., Chicago	S. S. Beman, Chicago
Residence	Wm. Best, Chicago	
Residence	W. S. Barbee, Englewood, Ill.	W. H. Milner, Chicago
Residence and Barn	H. Harrison, Chicago	
Apartment Building	Wm. Blain, Chicago	A. W. Foster, Chicago
Double Residence	Chicago, Ill.	Charles Adams, Chicago
Residence	C. Dickinson, Evanston, Ill.	W. H. Milner, Chicago
Residence	C. Dickinson, Chicago	J. R. Stone, Chicago
Residences (6)	T. Hagan & Son, Chicago	

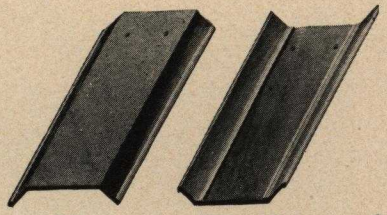
BUILDING	OWNER AND LOCATION	ARCHITECTS
Residences (2)	Messrs. Hart and Frank, Chicago	J. Wegman, Chicago
R. R. Station	C. R. I. & P., LaSalle, Ill.	J. T. Long, Chicago
R. R. Station	C. R. I. & P., Tiskilwa, Ill.	W. K. McFarlin, Chicago
Court House	Wheaton, Ill.	M. E. Bell, Chicago
Residence	Dr. A. W. Swift, Belvidere, Ill.	Bradley & Carpenter, Rockford, Ill.
Residence and Barn	J. H. Pierce, Kewanee, Ill.	M. E. Bell, Chicago
St. Patrick's Church	Ottawa, Ill.	
Residences (2)	C. T. Childers, Galesburg, Ill.	
Y. M. C. A. Building	Galesburg, Ill.	Wm. Wolf, Galesburg
Home for Female Juvenile Offenders	Geneva, Ill.	
Home of the Friendless	Fifty-first and Vincennes Ave., Chicago	C. S. Frost, Chicago
Residence and Barn	F. S. Hanson, Drexel Boulevard, Chicago	A. W. Buckley, Chicago
Residence	J. L. Cochran, Edgewater, Chicago	Geo. Maher, Chicago
Residence	J. L. Cochran, Edgewater, Chicago	Church & Jobson, Chicago
Residence	J. L. Cochran, Edgewater, Chicago	Geo. Maher, Chicago
Residence	Buena Park, Chicago	J. L. Silsbee, Chicago
Residence	Evanston, Ill.	F. P. Burnham, Chicago
Block of Houses	Chicago	A. W. Buckley, Chicago
Residence	A. Kraus, Chicago	Wilson & Marshall, Chicago
Block of Houses	Chicago	Kleinpelt & Borst, Chicago
Woodlawn Baptist Church	Chicago	Patton & Fisher, Chicago
Residence	Mr. Swift, Chicago	Swift & Hall, Chicago
Residences (3)	H. T. Davis, Chicago	Wilson & Marshall, Chicago
Residences (3)	Chicago	J. F. & J. P. Doerr, Chicago
Residence	J. C. Page, Buena Park, Chicago	
Residences (3)	C. W. Hoff, Chicago	
Residence	C. W. Hoff, Chicago	
Grain Elevator	W. H. Purcell Co., Chicago	Beyer & Rautert, Chicago
Grain Elevator	Watson, Fretts & Vincent, Chicago	
Store Building	Chicago	Cowles & Ohrenstein, Chicago
Apartment Building	Chicago	Healy & Gilbert, Chicago
Residences (2)	Chicago	
Y. M. C. A. Building	Chicago	Jenney & Mundie, Chicago
St. Vincent's Church	Chicago	J. J. Egan, Chicago
Residence	J. J. Damke, Chicago	W. H. Pagels, Chicago

BUILDING	OWNER AND LOCATION	ARCHITECTS
Residence	G. A. Whitson, Rushville, Ill.	
Gymnasium	Wheaton, Ill.	
Residence	J. W. Slaven, Kansas City, Mo.	W. C. Root, Kansas City
Residence	Clinton Hares, Indianapolis	
Public School	Dyer, Ind.	
Club House	Elkhart, Ind.	J. E. O. Pridmore, Chicago
Spalding Memorial Building	Athens, Pa.	A. H. Kipp, Wilkesbarre, Pa.
R. R. Station	C. R. I. & P., Wilton, Iowa	W. K. McFarlin, Chicago
R. R. Station	C. R. I. & P., West Liberty, Iowa	W. K. McFarlin, Chicago
Depot Building	A., T. & S. F. R. R., Dodge City, Kan.	
Residence	Lyman J. Reed, Ottawa, Kan.	
Residence and Barn	Minneapolis, Minn.	

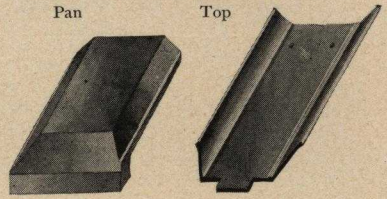
AMERICAN TILES

The construction of this tile is very simple, as shown in the illustrations, the same shape of tile being used for pans and tops, each piece being a separate tile. It gives a bold effect on the roof, the vertical lines being very pronounced. We make these tiles only on order, not carrying them in stock.

Size of tile	7 x 12 inches
Number in square	260 tiles
Weight per square	800 pounds
Exposure, obverse	4 x 10 inches
Exposure, reverse	7 x 10 inches



Pan Top



Eaves

Buildings Covered with these Tiles

BUILDING	OWNER AND LOCATION	ARCHITECT
Residence	Union Mutual Life Ins. Co., Chicago, Ill.	S. S. Beman, Chicago
Residence	Cincinnati, Ohio	S. S. Godley, Cincinnati
Residence	A. J. Conroy, Cincinnati, Ohio	Giannini & Moorman, Cincinnati
Residence	Otto I. Leisy, Cleveland, Ohio	
Residence	F. A. Wilson, Chicago	Wilson & Marshall, Chicago

SHINGLE TILES

Flat Shingle

We are making a Shingle Tile that is the superior of any tile of this shape in the market. The usual size of such tiles is 6 x 12 inches, and we make the shingles not only in that size but also 8 x 12 inches. These tiles are made in thickness of 3/8 inch and 1/2 inch, and may be variously shaped at the butts, as indicated in the accompanying illustrations. They are nailed to the sheathing, commonly with a 5-inch exposure. We countersink the nail holes. For circular roofs and towers, specially cut tiles in any of the shapes shown are furnished, requiring, however, more pieces to the square.

No 1

No. 2

No. 3

No. 4

No. 5

No. 6

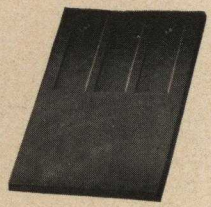
No. 7

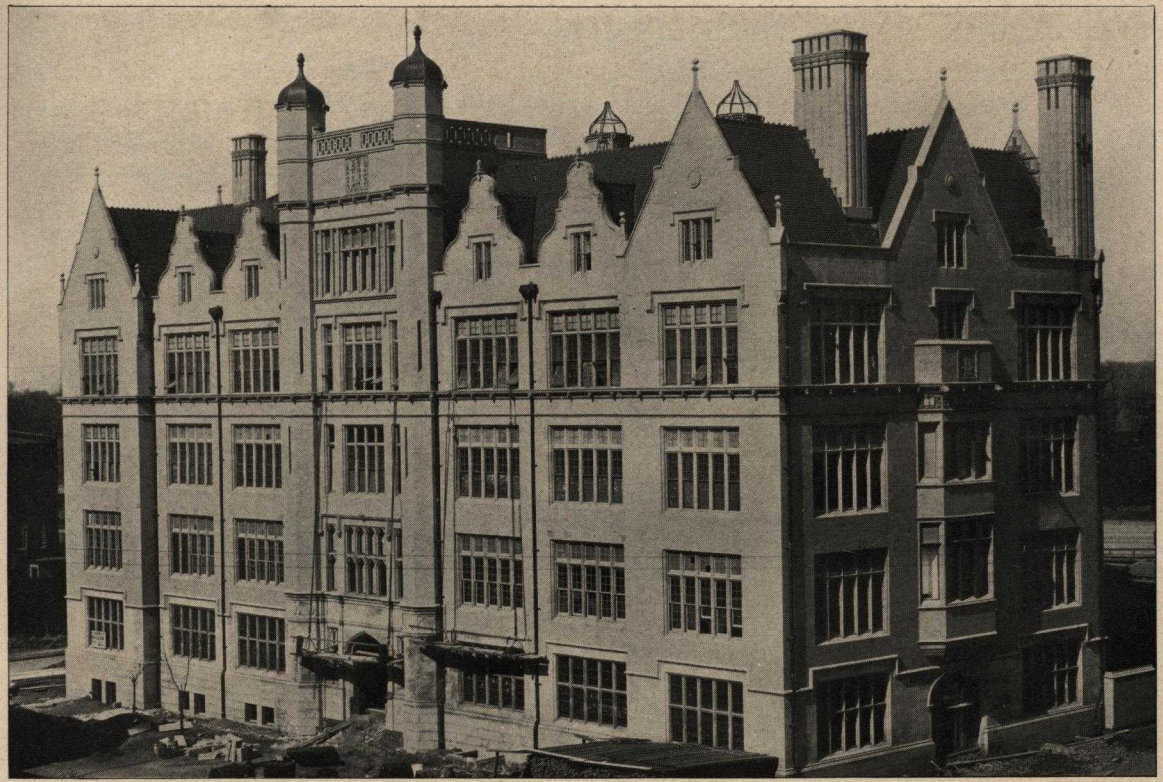
No. 1. Square End
No. 2. Round End
No. 3. Hexagon End
No. 4. Octagon End
No. 5. Wave End
No. 6. Gothic End
No. 7. Grecian End

Size of Tile ..... 6 x 12 inches
Number in square ..... 480 tiles
Weight per square ..... 1,100 pounds
Exposure ..... 5 x 6 inches

Size of Tile ..... 8 x 12 inches
Number in square ..... 360 tiles
Weight per square ..... 1,350 pounds

If laid 6 inches to the weather instead of 5 inches, the number in square is 300 and the weight per square is 1,250 pounds.





AUDUBON SCHOOL BUILDING, NEW YORK CITY
8 x 12-inch Shingle

C. B. J. Snyder, New York
Architect

Closed Shingle and Open Shingle

The principle of interlocking by breaking joints, with a simple "lip and lap" meeting of upper and lower tile, which has been described in connection with our 8-inch Conosera pattern as the effective device covered by the Babcock patents—now owned by us—applies also to our well-known shapes called Closed Shingle and Open Shingle, the difference between which is seen from accompanying illustrations.

In the Closed Shingle each tile covers one-fourth of every other tile, and the appearance on the roof is not essentially different from a flat tile, except that the relief is deeper. By the shoulder in the middle of the tile each upper tile is fitted to each under one, so that an absolutely tight roof is secured for a flat effect, without the use of cement, against any possible climatic condition. This tile is especially adapted in its effect to all designs where a flat roof surface of unbroken lines is desired. It is, however, a heavier tile on the roof than any other pattern we make, owing to its greater lap in laying.

Open Shingle

Closed Shingle

	Open Shingle	Closed Shingle
Size of Tile	8 x 12 inches	8 x 12 inches
Number in square	200 tiles	300 tiles
Weight per square	900 pounds	1275 pounds

The Open Shingle, on the contrary, is one of the lightest tiles we make, because each tile covers only one-eight of every other tile. The system of locks and channels used in making and laying this tile makes it weather-proof against all ordinary climatic conditions. It is one of the handsomest tiles when laid that we have ever put on the market and has been used on different styles of architecture very effectively, as will be seen from the illustrations.

Closed-Shingle Eave Tile

DEPOT OF ILLINOIS CENTRAL R. R., SPRINGFIELD, ILL.
Closed Shingle

Francis T. Bacon, Chicago
Architect

RESIDENCE OF MR. RALPH S. GREENLEE, CHICAGO
Open Shingle

Jenney & Mundie, Chicago
Architects

GATE LODGE, WOODLAWN CEMETERY, EVERETT, MASS.
Open Shingle

W. Hart Taylor, Boston
Architect

Buildings Covered with Our Shingle Tiles

FLAT SHINGLE

BUILDING	OWNER AND LOCATION		ARCHITECT
Elliott School Building	St. Louis, Mo.	8 x 12-inch	W. B. Ittner, St. Louis
Sherman School	St. Louis, Mo.	8 x 12-inch	W. B. Ittner, St. Louis
Residence	Mr. Orthwein, St. Louis, Mo.	8 x 12-inch	
Residence	John Farson, Oak Park, Ill.	8 x 12-inch	G. W. Maher, Chicago
Residence	Mrs. Peacock, Chicago	8 x 12-inch	E. Krause, Chicago
School	Audubon Ave., New York	8 x 12-inch	C. B. J. Snyder, New York
Shelter	Prospect Park, Brooklyn, N. Y.	8 x 12-inch	Parfitt Bros., Brooklyn
Residence	Dr. E. B. Ends, Hartford, Conn.	8 x 12-inch	H. N. Wilson, Pittsfield, Mass.
Church of Our Lady	East Orange, N. J.	8 x 12-inch	O'Conner & Metcalf, New York
Residence	Lloyd J. Smith, Chicago		R. A. Denell, Chicago
Residences (2)	Baker & Warren, Chicago		Church & Jobson, Chicago
Residences (8)	J. L. Cochran, Chicago		Church & Jobson, Chicago
R. R. Station	C., R. I. & P. R. R., Normal Park, Ill.		W. K. McFarlin, Chicago
Des Peres School	City of St. Louis, Mo.		W. B. Ittner, St. Louis
Arlington School	City of St. Louis, Mo.		W. B. Ittner, St. Louis
Chouteau School	City of St. Louis, Mo.		W. B. Ittner, St. Louis
Residence	Robert L. Fullerton, Des Moines, Ia.		Liebbe, Nourse & Rassmussen, Des Moines
Residence	D. E. Bremner, Chicago		Wilson & Marshall, Chicago

CLOSED SHINGLE

Lithgow Library	Augusta, Me.	Neal & Hopkins, Pittsburg, Pa.
Josephine Hospital	St. Louis, Mo.	Link & Rosenheim, St. Louis
Residence	J. L. Cochrane, North State St., Chicago	Geo. W. Maher, Chicago
Hull Memorial Chapel	Woodlawn, Chicago	W. A. Otis, Chicago
R. R. Station	Illinois Central, Springfield	F. T. Bacon, Chicago
R. R. Station	Erie R. R. Co., Franklin, Pa.	G. E. Archer, New York
Normal Practice School	Chicago, Ill.	N. S. Patton, Chicago
Residence	N. Witherell, Greenwich, Conn.	N. C. Mellen, New York

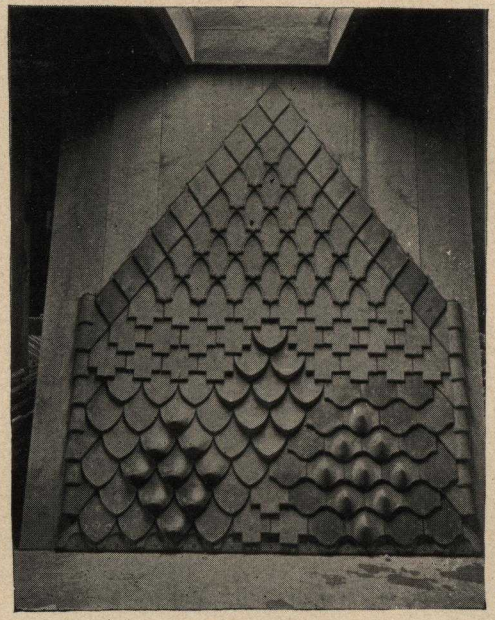
OPEN SHINGLE

BUILDING	OWNER AND LOCATION	ARCHITECTS
Residence	W. J. Frisbie, Camden, N. Y.	Gordon A. Wright, Syracuse, N. Y.
Gate Lodge	Woodlawn Cemetery, Everett, Mass.	W. Hart Taylor, Boston, Mass.
School	Dauphin Park, Chicago	Normand S. Patton, Chicago
Meter House	Omaha, Neb.	Wilson Bros. & Co., Philadelphia, Pa.
Residence	W. V. Snyder, Newark, N. J.	Thos. Cressey, Newark
R. R. Station	C., R. I. & P. R. R., Iowa City, Ia.	W. K. McFarlin, Chicago
Residence	Isaac Fletcher, Fifth Ave., New York	C. P. Gilbert, New York
Residence	Nathan Herzog, West Adams St., Chicago	Handy & Cady, Chicago
Residence	J. B. Hanna, Columbus, Ohio	Yost & Packard, Columbus
Residence	L. M. Hicklen, Columbus, Ohio	Yost & Packard, Columbus
Residence	Miss C. F. Forbes, Westwood, Mass.	George T. Tilden, Boston
R. R. Station	C., R. I. & P. R. R., Council Bluffs, Ia.	W. K. McFarlin, Chicago
Church	Christ Church, Corning, N. Y.	R. W. Gibson, New York
Residences (3)	West Seventy-Eighth St., New York	Clarence True, New York
Residence and Stable	A. C. Houghton, North Adams, Mass.	H. N. Wilson, Pittsfield, Mass.
Unitarian Church	Ithaca, N. Y.	W. H. Miller, Ithaca, N. Y.
Residence	C. F. Unrath, West Monroe St., Chicago	Alfred Smith, Chicago
Residence	L. Mandel, Michigan Boul., Chicago	Dixon & Brookes, Chicago
Office Building	Steinway Hall, Chicago	Dwight H. Perkins, Chicago
Residence	A. T. Ambrose, East Orange, N. J.	Halsey Wood, Newark, N. J.
Pumping Station	City of La Crosse, Wis.	A. W. Cole, Chicago
Residence	Mrs. I. M. Thacker, Dayton, Ohio	Williams & Andrews, Dayton
Residence and Stable	R. S. Greenlee, Graceland Ave., Chicago	Jenney & Mundie, Chicago
Residences	M. and H. Hart, Drexel Boul., Chicago.	C. S. Frost, Chicago
College	Music Hall, N. W. University, Evanston, Ill.	W. A. Otis, Chicago
R. R. Station	Erie Ry. Co., Alfred, N. Y.	G.E. Archer, New York
Residence	C. W. Hoff, Chicago	Simpson & Mueller, Chicago

COMBINATION TILES

Group of Various Shapes

We illustrate on this page a group of our Combination tiles, from which it will appear that several of the old and much favored shapes, such as the Grecian, Gothic, Hexagon, Octagon, Wave, Diamond, etc., can be combined together so as to produce effects sometimes desired by the architect. Moreover, these patterns not only can be made to work out almost any desired design on the roof, but also can be laid so as to secure an absolutely tight roof, by our "lip and lap" construction without the use of cement.



By our construction all of a dozen different styles of tile have exactly the same shape on the upper half of the tile, and hence can be laid together and will interlock; no matter what the shape of the bottom. It will be obvious at once that the possibility for special designs is limited only by the desire and the design of the architect. Any conceit that can be condensed into the size shown, 8 x 12 in. on each tile, can be developed thus and given real expression on the roof.

Combinations

We do not undertake to show in detail all the shapes of our Combination Tiles; only those that have been most used heretofore. Any one of these shapes is absolutely weather-proof when together

Round End.

Gothic

Rhinoceros

Concavo

or in combination with each other. Each tile has a "lip" and a "lap" of 1 inch in height, so that no back-set or draught can cause a leak.

Grecian

Wave

Fancy Eave Tile

Octagon

Hexagon

Size of Tile	8 x 12 inches
Number in square	300 tiles
Weight per square	675-900 pounds
Exposure	6 x 8 inches

COMBINATIONS

On this page we illustrate two variations of the Gothic Tile, showing their adapability for producing different architectural effects when used in combination. One represents a standard 8 x 12 inch Combination Tile of Gothic form, but its surface of a gradually rising curved contour, merging at or near the lower edges of the tile in a raised horn, or nose, whence its name, "Rhinoceros." The major portion of the surface of the tile rises from all sides in a concave curve, which gradually increases in concavity to the horn, with the exception of the lower side of the tile's surface, which rises in a convex curve to the horn, and these two oppositely curved surfaces merge gradually into one another. A very telling effect may be secured by using the Rhinoceros Tile in combination with the Gothic to accentuate the gutter line of a building.

The other illustration shows a design in imitation of a shell, made in relief upon the surface of the tiles, and laid in quincunx order.

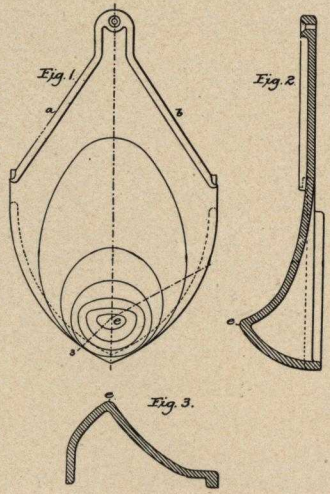


FIG. 2.

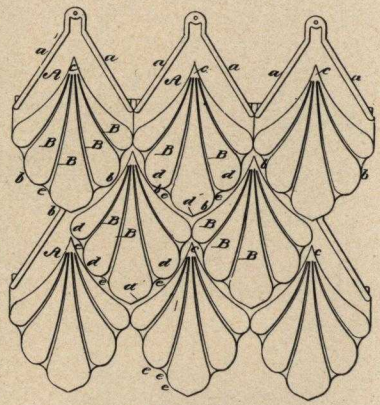
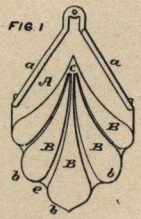


FIG. 1



COMBINATIONS

We show two other styles of tile with ornate surfaces, the first the Diamond-Combination Tile with cross-band and rosette superimposed; and the second, the Persian-Combination Tile, with a plain surface save band and balls around the lower half. When a number of tiles of either of these designs are associated together, each band forms in appearance a continuous band running across the associated tiles and intersecting other diagonal bands. It should be borne in mind that all these Combination patterns are made to lock by the "lip" and "lap" system, already described; that they are interchangeable and that almost any device, of appropriate size, whether heraldic design, coat of arms, or other ornamentation may be placed on the surface of these shapes.

Fig 2

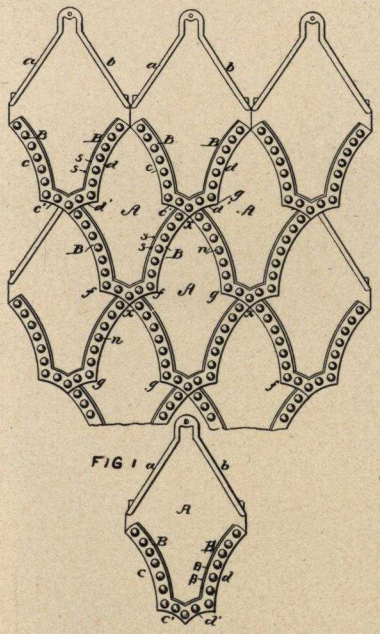


FIG 1

FIG. 2.

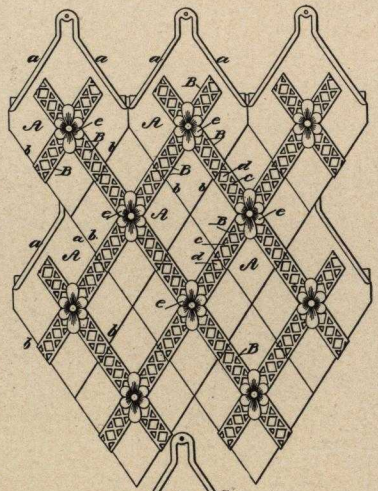
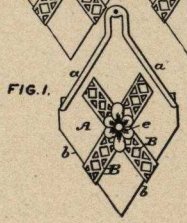
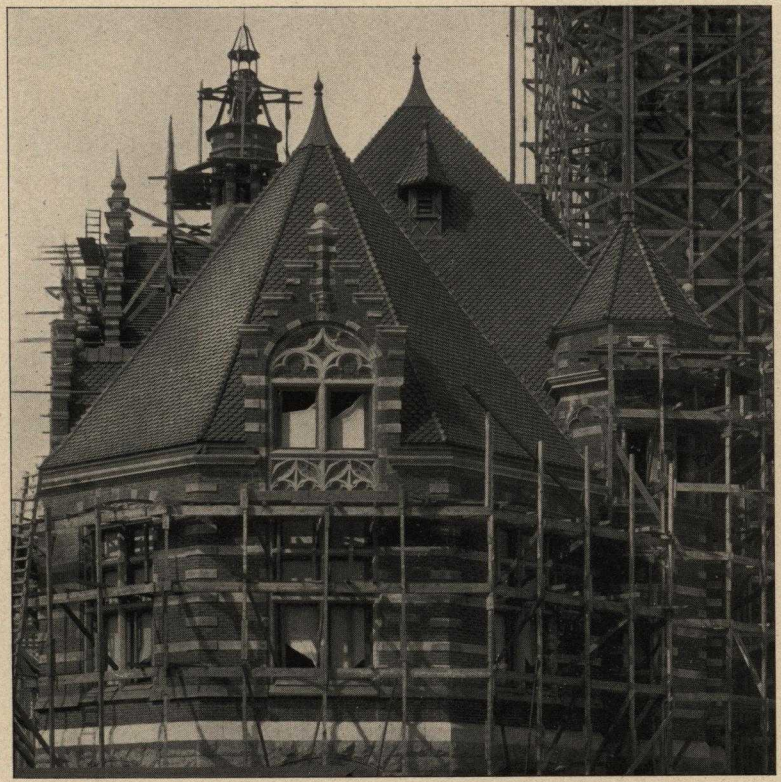


FIG. 1.



EMERSON HALL, BELOIT COLLEGE, BELOIT, WIS.
Grecian and Wave Tiles combined

Patton, Fisher & Miller, Chicago
Architects



U. S. POST OFFICE BUILDING, PATERSON N. J.
Gothic Tile

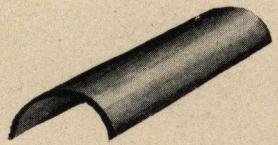
W. Martin Aiken, Washington, D. C.
Architects

Buildings Covered with Combination Tiles

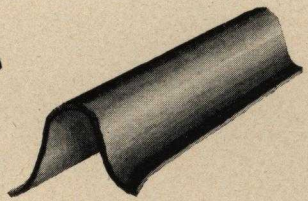
BUILDING	OWNER AND LOCATION		ARCHITECTS
Residence	Justice H. B. Brown, Washington, D. C.	Gothic	W. H. Miller, Ithaca, N. Y.
Residences (2)	West Seventy-Second St., New York	Horn-Gothic	Clarence True, New York
Residences (3)	West Seventy-Fifth St., New York	Horn-Gothic	Clarence True, New York
Residence and Stable	L. A. Carton, Chicago	Gothic	W. A. Otis, Chicago
Scoville Apartment House	Oak Park, Ill.	Gothic	Patton, Fisher & Miller, Chicago
Postoffice and Court House	Paterson, N. J.	Gothic	W. M. Aiken, Washington, D. C.
Emerson Hall	Beloit College, Beloit, Wis.	Grecian-Wave	Patton, Fisher & Miller, Chicago
Residence	Mr. Nelson, Kansas City, Mo.,	Combination Shingle	
Residence	E. L. Hyde, Plainfield, N. J.,	Combination Shingle	E. L. Hyde, Plainfield
Residence	Mrs. Amelia Schlosser, Chicago	Gothic	W. A. Otis, Chicago

HIP ROLLS

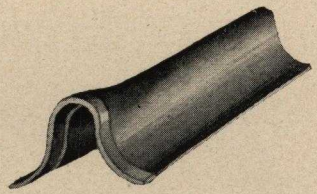
101—4 x 12 in., 3-in. lap



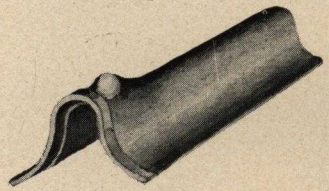
102—6 x 12 in., 3-in. lap



103—6 x 12 in., 3-in. lap



104—6 x 12 in., 3-in. lap-joint



105—6 x 12 in., 3-in. lap-joint

106—6 x 12 in., 2-in. lock

108—5 x 5 x 12 in., 3-in. lap-joint

109—6 x 6 x 12 in., 3-in. lap-joint

111—4½ x 6 x 12 in., 3-in. lap-joint

113—6 x 6 x 12 in., 3-in. lap-joint

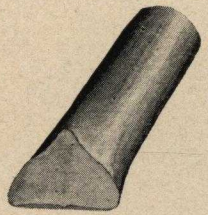
114—7 x 7 x 12 in., 3-in. lap-joint

116—9 x 9 x 14 in., 3-in. lap

We also make 7-inch Plain, 5-inch Knob and other Hip Rolls.

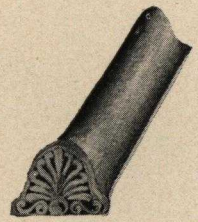
HIP STARTERS

151—4 x 12 in.



152—6 x 12 in.

153—6 x 12 in.



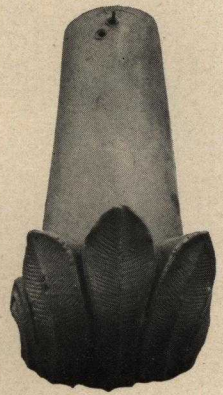
154—6 x 12 in.

156—5 x 5 x 12 in.

155—6 x 12 in.

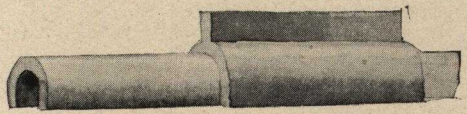
157—5 x 5 x 12 in.

We make Hip Starters for all our patterns of Hip Rolls.



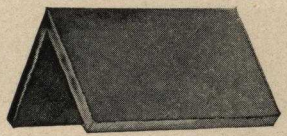
158—7 x 7 x 12 in.

RIDGINGS

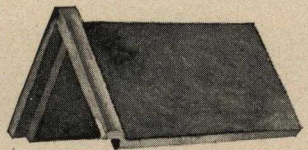


201—3½ x 12 in.

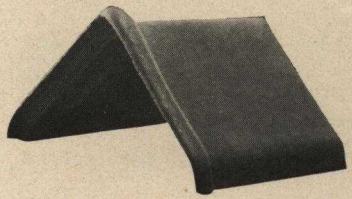
202—4½ x 12 in.



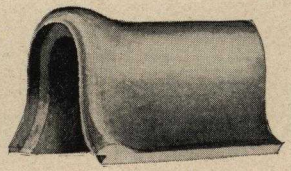
203—7 x 7 x 12 in.



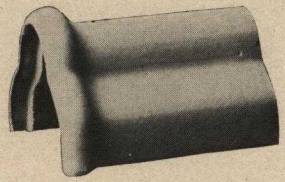
204—7 x 7 x 12 in.



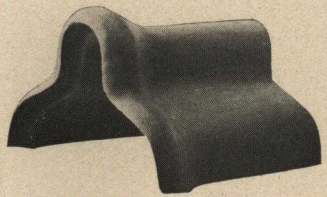
205—8 x 15 x 13 in.



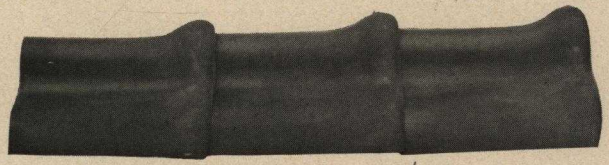
206—
A— 6 x 12 in.
B— 8 x 12 in.
C—12 x 12 in.



207—
A— 6 x 12 in.
B— 8 x 12 in.
C—12 x 12 in.

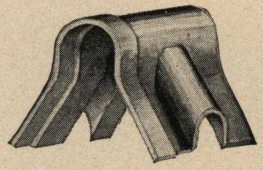


208—7 x 13 x 13 in.

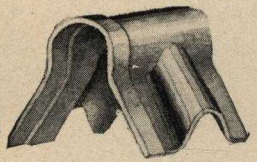


208½—As No. 208 appears when set.

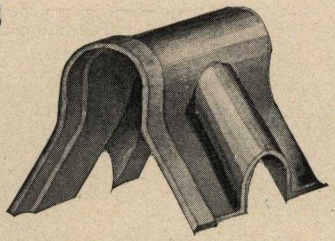
RIDGINGS



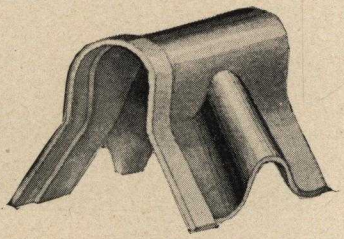
209—6 x 5¾ in., Small Roman



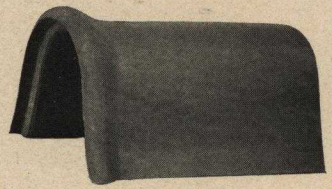
210—6 x 5¾ in., Small Spanish



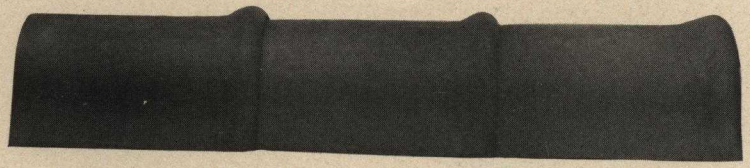
211—8 x 8 in., Large Roman



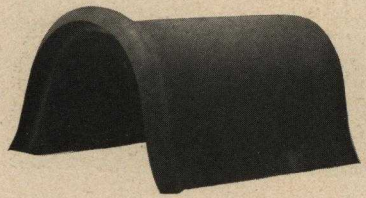
212—8 x 8 in., Large Spanish



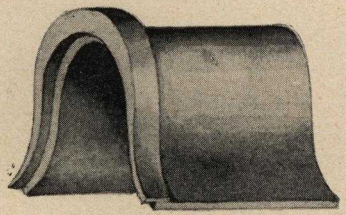
213—8 x 8 x 12 in.



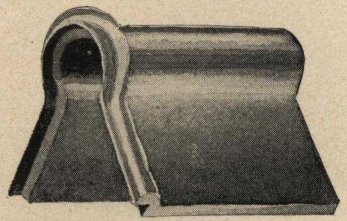
213½—As No. 213 appears when set



214—10 x 10 x 12 in.



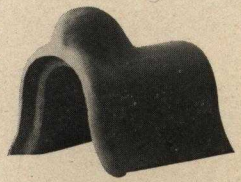
215—12 x 12 x 12 in.



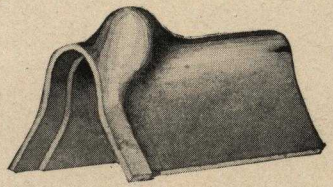
216—12 x 12 x 12 in.

CRESTINGS

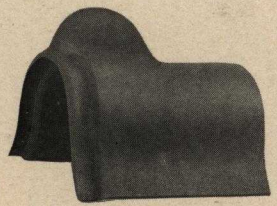
Crestings are made with 1-inch lap-joints and usually 1-foot lengths; thickness 7/8 inch; wings 7 inches; any pitch; height of crown above ridge pole as noted, save where full dimensions are given. Weights vary from 5 to 15 pounds each. Various effective combinations can be obtained by using two or more patterns.



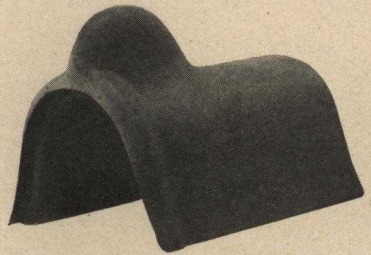
301—6 x 8 x 10 in.



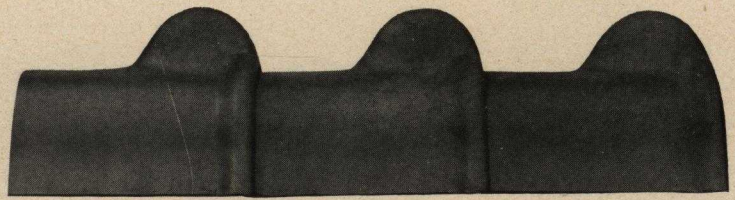
302— A— 6 x 12 in.
B— 8 x 12 in.
C—12 x 12 in.



303—8 x 11 x 12 in.

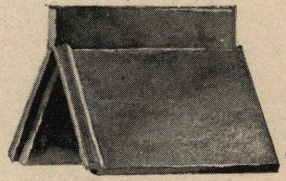


304—10 x 13 x 15 in.

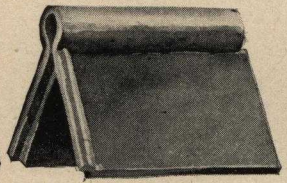


304½—As No. 304 appears when set

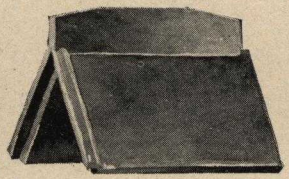
CRESTINGS



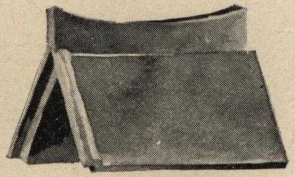
305—3 in.



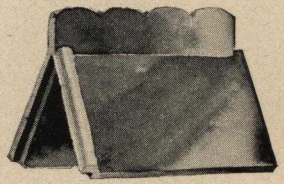
306—3 in.



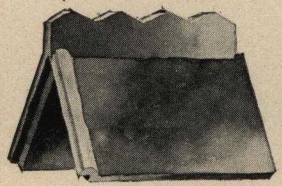
307—3 in.



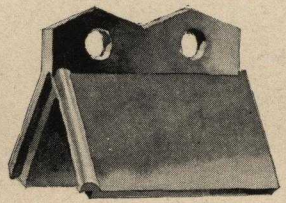
308—3 in.



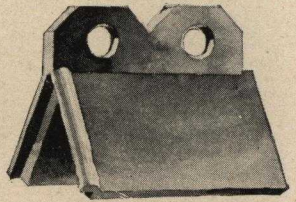
309—3 in.



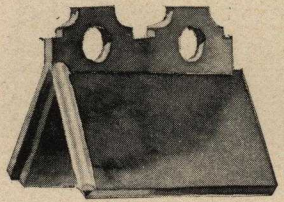
310—3 in.



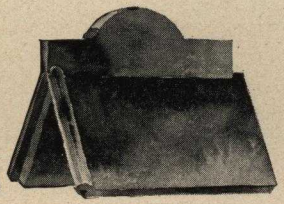
311—4 in.



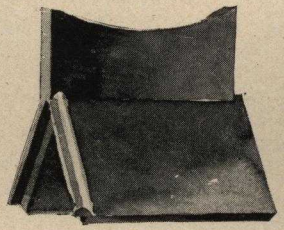
312—4 in.



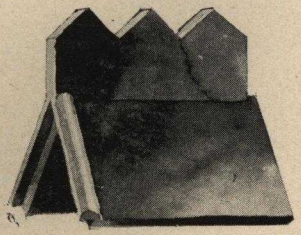
313—5 in.



314—5 in.

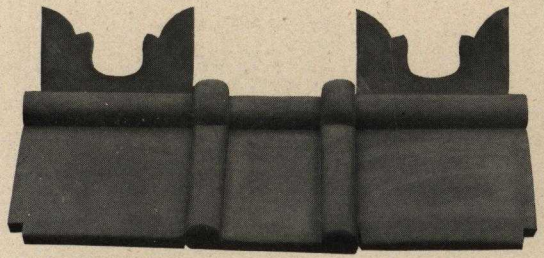


315—6 in.

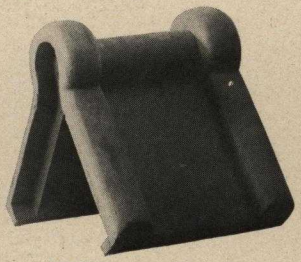


316—6 in.

CRESTINGS



317 A and B joined



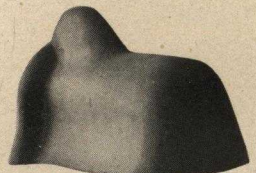
317 A—11 x 11½ x 11 in.

317 B—11 x 15¼ x 12½ in.

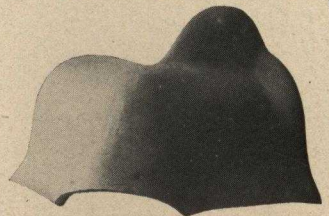
We make Deck Moldings for any of the above patterns at the required pitch.

TERMINALS

Terminals are made at the required pitch. We make patterns not shown here, to correspond with all our Ridgings and Crestings. When full dimensions are not given below, the height is given "over all". Weights vary from 12 pounds to 100 pounds and more.

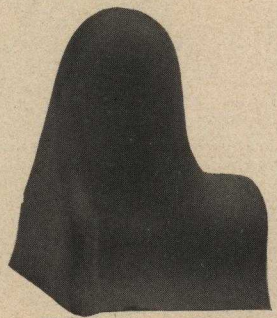


401—8 x 8 x 12 in.



402—Fits Cresting No. 303

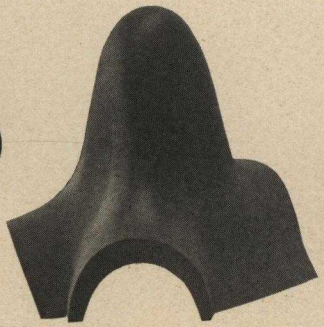
403—8 x 13 x 13 fits Ridging No. 205



404—For Cresting No. 303

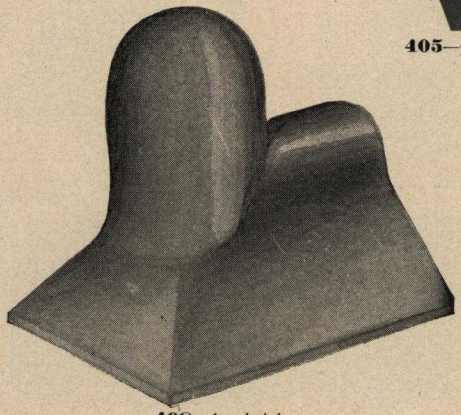
TERMINALS

406—13 x 20½ in., for Ridge No. 205

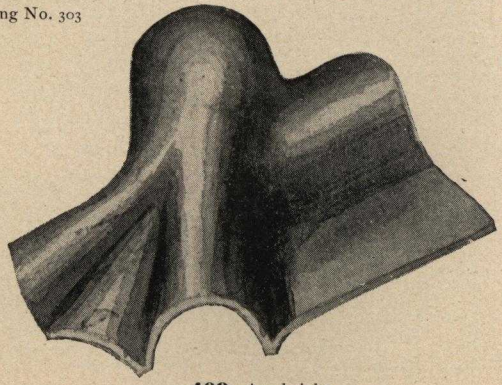


405—7 x 10 x 16 in., fits Cresting No. 303

407—21 x 19 in., 4-way

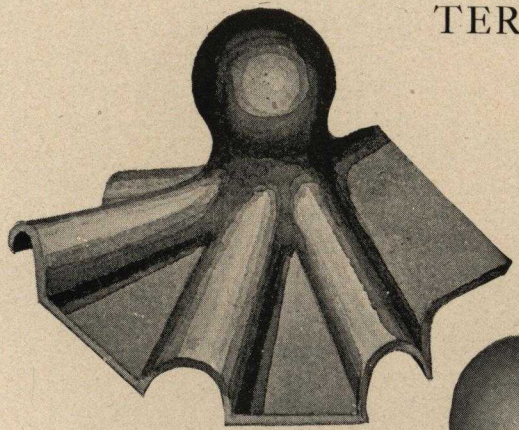


408—Any height

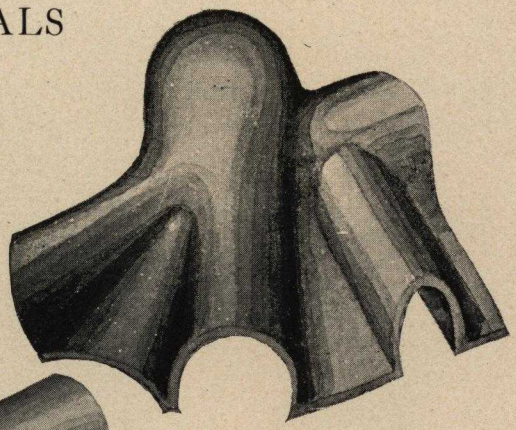


409—Any height

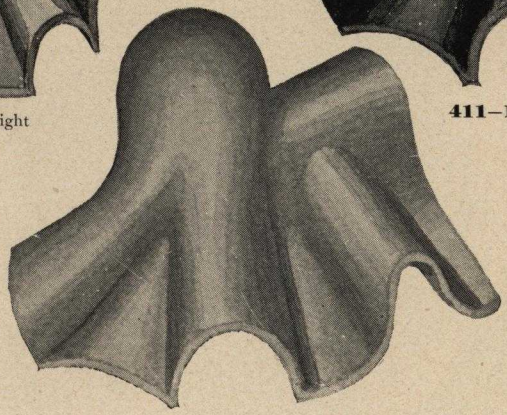
TERMINALS



410—Any height

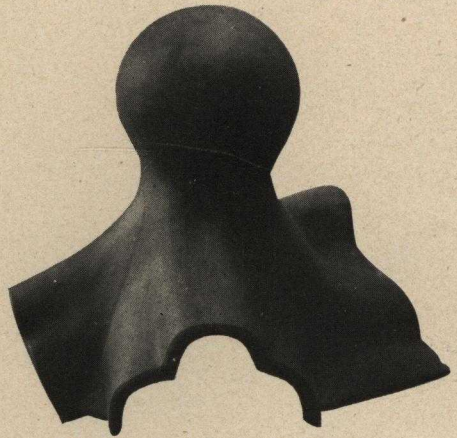


411—Roman, 2-way

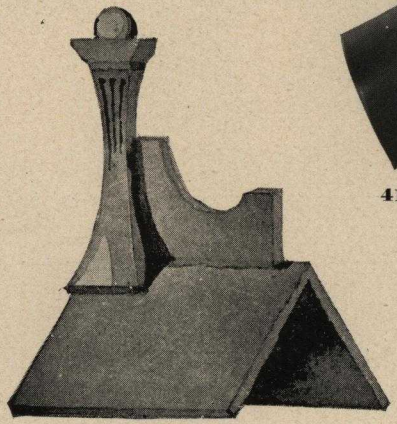


412—Spanish, 2-way

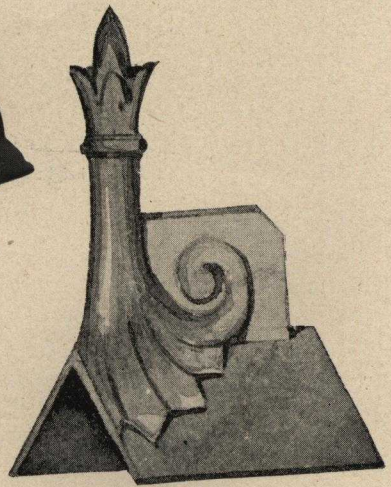
TERMINALS



413—18 x 20 in., 10-in. rise; for Ridge No. 208



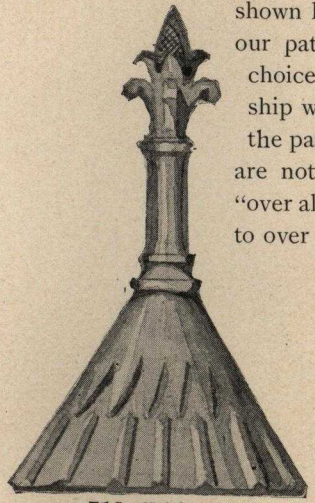
414—2-ft. rise



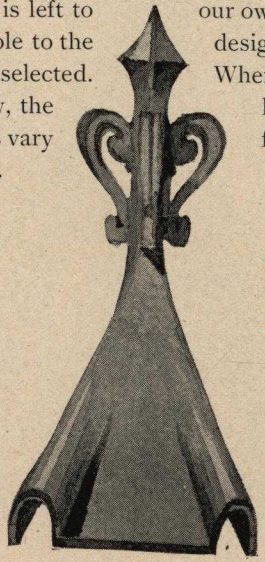
415—2½-ft. rise

FINIALS

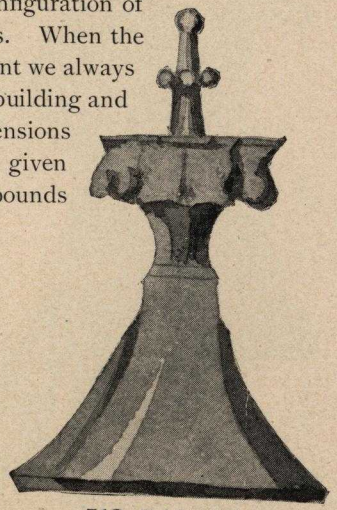
We will make Finials at any required pitch and will work out special patterns after architects' designs if it is practicable to make them in clay. We make a large number of Finials in stock patterns not shown here and that are especially adapted to the configuration of our patterns of Tile, and of Ridgings and Crestings. When the choice of patterns is left to our own judgment we always ship what is suitable to the design of the building and the pattern of tile selected. When full dimensions are not given below, the height is given "over all". Weights vary from 25 pounds to over 100 pounds.



510—Height 2½ ft.

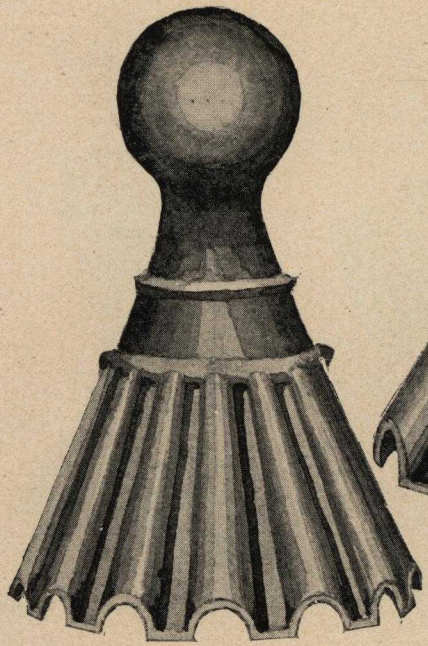


511—Height 3 ft.

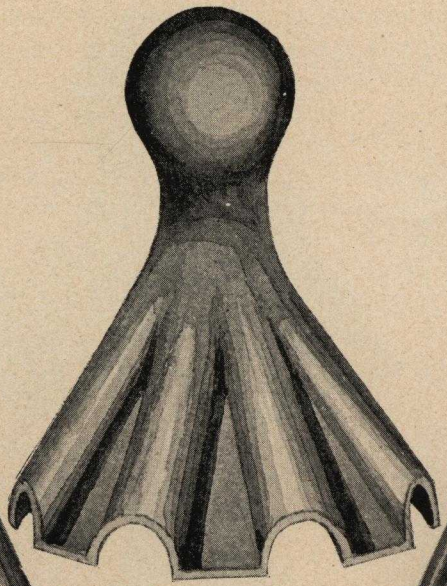


512—Height 2½ ft.

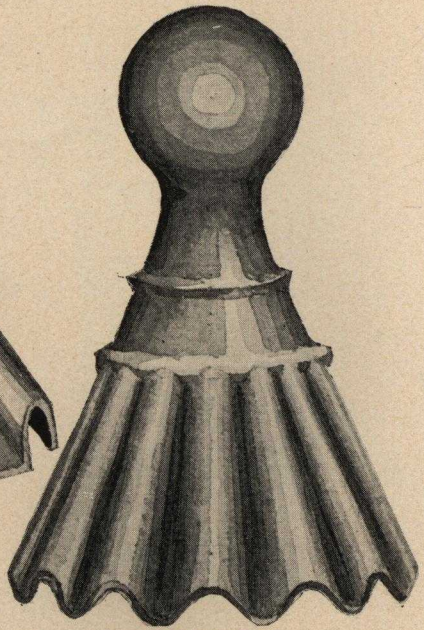
FINIALS



514—Roman



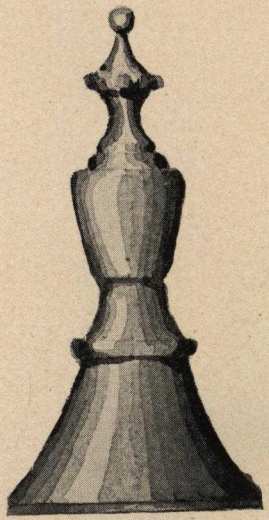
513—Any height



515—Spanish

FINIALS

The designs on this page are principally intended for round towers, although they, of course, can be carried out in Gable or Hipped Finials as well.



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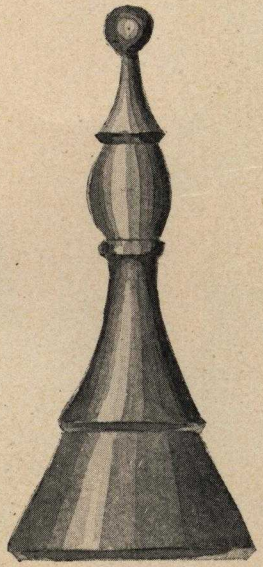

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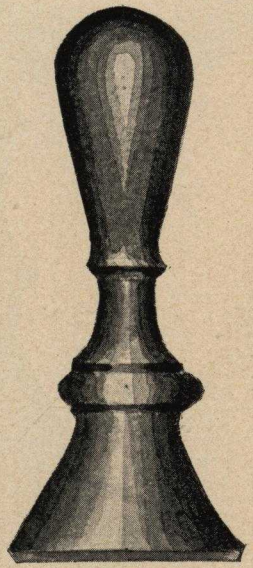

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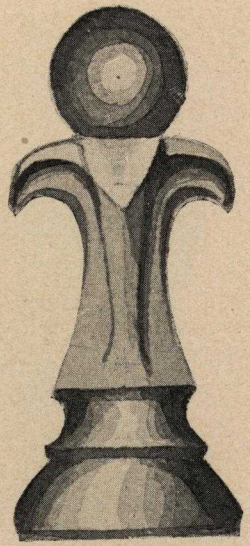
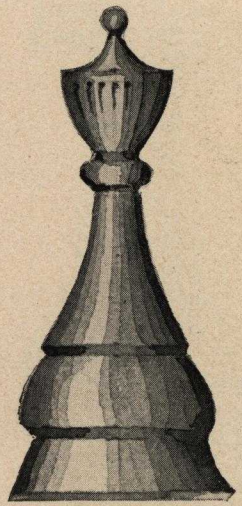


518

FINIALS



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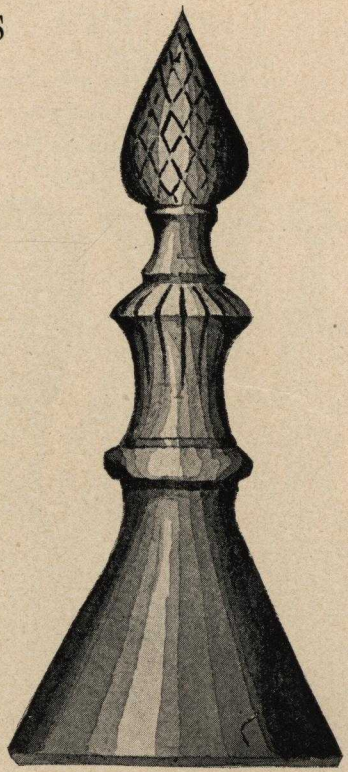
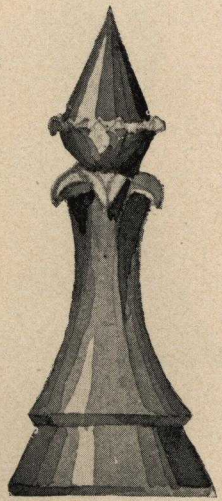


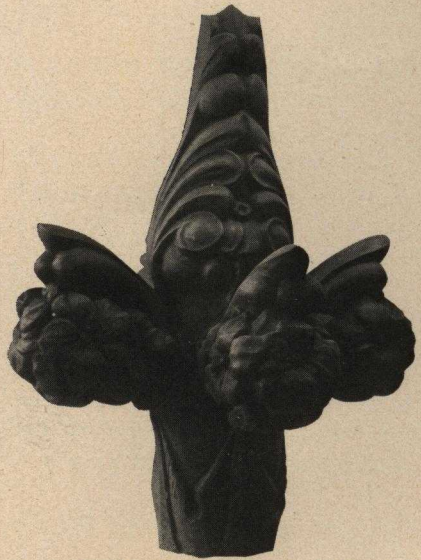
522



521

FINIALS

530—Gargoyle



523—21 x 28 in.; weight 90 pounds

524—21 x 41 in., weight 118 pounds

GENERAL INFORMATION

PRICES.—There is a wide variation in the prices of Tile—from $8.00 per square to $25.00, according to shape, number to square, color and finish. Hip Rolls vary in price, according to design, from 20 cents to 50 cents per foot; Ridgings from 35 cents to $1.00 per foot; Crestings from 50 cents to $5.00 per foot; Deck Moldings follow the prices of Ridgings and Crestings with which they may be used; Terminals vary from $2.50 each upward; Finials from $3.50 each upward. Send for price list published on separate sheet.

COLORS.—We make Tiles in such various colors as may be secured by a legitimate blending of clays, or of clay and such other ingredients as are homogeneous. Hence we can supply Red, Buff, Brown, Grey, Chocolate and Mottled Tiles.

The natural color of our tiles is a beautiful clear red. We ship, when requested, in uniform shade, though architects are gradually coming to the conclusion that burned clay material for architectural purposes ought not to be closely assorted to a particular shade of any one color, to secure the most artistic effects.

MISCELLANEOUS.—To prevent wind suction we advise the use of sheathing and a good roofing felt underneath the tiles.

We shall be pleased to furnish forms of specifications for any of our patterns, on application by architects.

There is no longer any novelty in Glass Tiles. We were the first manufacurers to use them, and we continue to furnish them to member with any of our Roll, Interlocking or Combination Shapes when desired for skylights.

Our Flat Shingle and French B patterns are especially suitable for use as Siding Tiles. We also

make a Siding Tile under the Babcock patents that breaks joints alternately and locks with the "lip and lap" system.

ORDERS.—Our patterns of Tile carry names, and the trimmings carry numbers. All orders should name the Tile wanted and give the catalogue number for Hip Roll, Ridging, etc.

The drawings of the four elevations and roof plan of the building, with scale of measurement should accompany requests for estimates, and all orders. We will furnish estimates promptly on application.

When cut work and special forms of trimmings are required, sufficient time must be given to make, burn and deliver the order. It requires usually four weeks after receiving plans to ship such orders.

On orders for less than car lots there is an extra charge for package and cartage amounting to about $1.00 per square and about 10 per cent on the price of trimmings. Such orders are invariably sold free on board of cars at factory. The minimum car-load is 24,000 pounds.

Our orders are shipped carefully packed. Claims for shortage must be made on receipt of goods.

FROM ARCHITECTS

CHICAGO, November 18, 1897.—The Open Shingle tile made by you and furnished for the residence and stable of Mr. R. S. Greenlee has now been on the buildings for two years. It has given every satisfaction and we have as yet to hear of a single complaint. Its weathering qualities we consider first class and the artistic effect excellent. We now feel that at last we have discovered a tile that can be laid without cement. Yours truly,

JENNEY & MUNDIE.

BOSTON, January 12, 1899.—We wish to express to you our approval of the Conosera tiling supplied and put in position on the roof of the Grove Hall Engine House for the City of Boston. The manner of laying was so methodical and workmanlike it could not but call for the highest praise. The work was done to our entire satisfaction and the result more than fulfills our expectations. We hope soon to have an opportunity to again use your product. Very truly yours,

PERKINS & BETTON.

CHICAGO, March 31, 1896.—It is due you to know that your Conosera tile used for roofing the Pullman Memorial Church at Albion, N. Y., and the Chicago and Alton Passenger Station at Springfield, Ill., has given unqualified satisfaction from both practical and artistic standpoints. The beauty of the roofs of these buildings is largely due to the use of your handsome tile, and I know of no other roof covering that excels the roofing tile furnished my buildings by you. Yours truly,

S. S. BEMAN.

NEW YORK, November 28, 1898.—I have yours of the 11th inst., and replying thereto I am very glad to express my entire satisfaction with the tile roofing work you did for me on the building (St. Margarets' Hospital, Pittsburg, Pa.) in the spring of '97. Your business methods yielded exceptional expedition, which, together with the great mechanical accuracy of your work were the causes of gratification to me that this contract fell into your hands. Your roofing tile ran exceptionally uniform, and of a superior character and a very artistic effect in bulk, because of the vigor of the lines upon which you modeled each piece. Trusting that this will fully reply to your questions in this matter, I remain, Yours very truly,

ERNEST FLAGG.

COLUMBUS, O., April 7, 1898.—We desire to state that we, as architects for the Biological building at the Ohio State University, have made an acceptance of the 10-inch Conosera tile roof on the building, with hips, ridges and finial terminals, and it is to our entire satisfaction as well as to the entire satisfaction of the Board of Trustees of the University. This is the eighth Conosera tile roof we have used on large public buildings in Ohio, and we take pleasure in saying that we have not known or heard of any damage being caused by leaks, trouble from capillary attraction or other defects, and the durability is superior to any tile roof we have ever used. From an artistic point, roofs made of this tile are pleasing to ourselves as well as to the general public, and we feel that we can safely recommend a roof made of this tile to our clients as safe, durable and artistic. Yours very truly,

YOST & PACKARD.

URBANA, ILL., April 18, 1899.—Your Conocera tiles were used on the new library building of this university (University of Illinois), completed nearly two years since, and have proved entirely satisfactory in every respect. We should certainly use them on any new buildings requiring a first-rate, permanent roof, because we prefer them to any other tiles known to us. Yours truly,

RICKER & WHITE.

CHICAGO, April 12, 1899.—I have never seen any better roofing tiles, both as to material and workmanship, than those furnished by you in the various patterns which I have used—and I believe that I have now tried most of them. Also, it gives me pleasure to bear witness to the exceptional care taken in properly filling orders, as well as the courtesy of your representatives, both of which points very materially add to an architect's comfort. Yours very truly,

W. A. OTIS.

CHICAGO, November 18, 1897.—I am in receipt of your favor of the 16th in reference to the Conosera roofing tile used on the residence of Mr. A. B. Gardner at Dowagiac, Mich. Will say in reply that your tile has given perfect satisfaction; are hard burned and of splendid uniform color and have been greatly admired. I take pleasure in recommending them to any one who may desire both a durable and artistic roof. Very truly yours,

W. K. JOHNSTON.

PHILADELPHIA, PA., March 17, 1898.—It affords me the greatest pleasure to recommend the Celadon Terra-Cotta Co.'s roofing tile. Having used it on the Church of Our Lady of Mercy at Broad and Susquehanna Ave., and the Church of Our Lady of Good Council at Bryn Mawr, I can safely say that there is no tile in the market equal to it, either in finished appearance, durability or a practical weather-tight construction. The unsightly snow guards are not required in this system of roofing. Yours respectfully,

E. F. DURANG.

BOSTON, March 7, 1899.—It gives me much pleasure to inform you that your work at Woodlawn is in every way satisfactory. The effect produced by the use of your tile is strikingly beautiful. The workmanship is of the highest order and well deserving of praise, and I should not hesitate to use your product in any future work which may require the same. Respectfully yours,

WILLIAM HART TAYLOR.

ST. LOUIS, MO., September 21, 1896.—Replying to your favor of the 15th inst. regarding the tile used by us upon the residence and coach house on Mr. John W. Kauffman's premises in this city, will say that the same are very satisfactory to us in every particular, and we shall be very glad indeed to say a good word for them whenever occasion presents itself. They are certainly artistic, and what is better still, make an absolutely tight roof, proof of which we have had in that there have been no leaks of any kind during the recent heavy rains we have had since the roof was completed. Wishing you the best success, we are, Yours very truly,

LINK & ROSENHEIM.

CHICAGO, April 14, 1899.—Having lately made a visit to Springfield, Ill., for the purpose of inspecting our new passenger station recently completed at that place, I wish to say, with pleasure, that I found all the roofs of this building where your Closed Shingle tile were used, in a perfect condition. I consider your Closed Shingle by far the best on the market and especially so for the roofs of railroad buildings. Not only do they make a beautiful roof, but also one that will remain intact for many years. Your locking devices, I believe, are as near perfect as made on any tile, and the "cut" work which you furnished for valleys and hips was neatly cut and came out perfectly when laid. I wish to further state that I never had a more select lot of tile laid on any piece of work, each tile being as free from warp and other imperfections as the most skeptical could ask. Truly yours,

FRANCIS T. BACON,
Architect Illinois Central Railroad Co.

WILKESBARRE, PA., April 20, 1899.—The tiles furnished by you for the Spalding Memorial Library and Museum at Athens, Pa., are eminently satisfactory to me, both in appearance and quality.

ALBERT H. KIPP.

CHICAGO, June 12, 1895.—We have used your roofing tile on a great many buildings and have always found the same very satisfactory, and would recommend same on any good work. Yours truly,

H. R. WILSON.

CHICAGO, October 5, 1896.—This is to certify that we have used the French pattern tile and we are well pleased with the effect of the tile on the roof and find everything as represented by the manufacturers. Very truly,

CHURCH & JOBSON.

REDLANDS, CAL, May 5, 1899.—In repy to your inquiry respecting the Spanish tile roofing you supplied for A. K. Smiley's Public Library Building, at Redlands, Cal., April, 1898, I beg to state that all concerned are well pleased with the same, and as to color and effect, it gives entire satisfaction, and I shall be pleased to recommend your roofing tile in the future.

T. R. GRIFFITH.

BUFFALO, N. Y., May 1, 1899.—Your six and eight-inch Conosera roofing tile which I used on the American and Canadian bridge offices at the falls, have proved in every way satisfactory to me, both from a practical and artistic standpoint. Your workmanship on same is highly commendable and I assure you that in future work where tile may be required, your product will receive my best consideration.

Respectfully yours,

ROBERT A. WALLACE.

CHICAGO, August 20, 1898.—The "French A" tile furnished by you for the Soldiers' Widows' Home at Wilmington, Ill., were all right in every way and the roof looks well and is perfectly tight. I shall certainly use the tile again at the first opportunity.

Yours very truly,

R. T. NEWBERRY.

CHICAGO, April 20, 1899.—Your "French A" tile lately used by us on buildings on Fifty-first Street near Grand Boulevard have given good satisfaction and have greatly encouraged us in using your tile whenever occasion presents itself. For architectural effect they are ahead of any other material in the market. Respectfully yours,

J. F. & J. P. DOERR.

KANSAS CITY, MO., April 25 1899.—I wish to state in response to your inquiry regarding my experience with the use of your Spanish tile, that in the two instances in which I have used it the material has proved perfectly satisfactory. First case above mentioned was the depot at Port Arthur, Texas, for the K. C., P. & G. Railroad; second being the Christian Science Church in this city. I am very much pleased with the color of the roof and have been so far very much pleased in every way with the material. Very truly yours,

GEORGE MATHEWS.

CHICAGO, June 13, 1895.—Complying with your request for an expression of my opinion of the roofing tile, your "French" pattern, furnished by you for the roof of the Home for Juvenile Female Offenders, erected at Geneva, Ill., I need say only that they were fully up to the requirements of specifications, which accounts for their being on that roof. I might add to this, that, when the job was completed, I was more than pleased with the selection that I had made, which bespeaks my further use of your roofing tile. Respectfully yours,

LEWIS M. CURRY.

FROM CLIENTS

WINONA, MINN., April 28, 1899.—As secretary and treasurer of the building committee of Central M. E. Church of this city, I can say our church, completed some three years ago, is roofed with your tile, and we have had no reason to regret its use. Artistically it adds very much to the beauty of the church and as a roof it has been very satisfactory.

Yours very truly,

R. McBURNIE.

COLUMBUS, April 18, 1898.—We have just completed two college building,—Townshend Hall, length 260 feet, average breadth 70 feet, three stories; and the Biological Building, length 110 feet, average breadth 75 feet, two stories, and for roofing have used the Conosera Tile. So far we have only praise to speak of it. It adds much to the dignity and artistic beauty of the buildings and we are glad we were able to use it. We recommend it without reservation. After seeing it on the Law and Dairy Buildings at Cornell University we were not satisfied with anything else. Very truly yours,

ALEXIS COPE,
Secretary Ohio State University.

TOLEDO, OHIO, April 14, 1896.—Replying to your inquiry of March 28th concerning the roof of our Columbus Passenger Station recently put in place by your people, I am pleased to say that its appearance from an artistic standpoint is all that can be desired; the accuracy of the lines is somewhat remarkable and their boldness is certainly a pleasing feature. Its durability is, of course, a matter of conjecture [this roof had just been laid when this letter was written], but I am thoroughly convinced that it will prove itself worthy of high commendation. Yours truly,

C. BUXTON,
Chief Engineer T. & O. C. R. R.

CHICAGO, June 13, 1895.—Regarding your tile which was furnished for the roof of my residence, No. 4331 Drexel Boulevard, I am glad to say that the same are up to my expectations in every particular, having proven to be a perfectly sound and water-tight roof, and, besides being durable, is also very beautiful. Yours respectfully,

WILLIAM BEST.

AUGUSTA, ME., January 13, 1896.—The Building Committee of the Lithgow Library cheerfully testify to the excellency of your roofing tile, both as to its efficiency in securing a weather-tight roof and its fine artistic effect in combination with the grey granite walls of our building. Our roof, made of your tile, has thus far withstood without impairment the inclemencies of one full Maine winter and one-half of another. We regard this test as a severe one, and as demonstrating that we made no mistake in our selection of roofing material.

Very respectfully,

CHAS. E. NASH,
Sec'y Building Committee, Lithgow Library.

CORNING, N. Y., November 22, 1894.—The Celadon Terra-Cotta Co. Ltd. has just put the tile roof on the new Christ Church in this city. It would be impossible for me to convey the satisfaction and admiration our people have for this splendid roof. It is universally acknowledged to be the handsomest tile roof ever seen in this vicinity, and best of all it is so substantial, so durable and perfect that it must endure for ages. We expected to have a slate when we commenced building, but so greatly pleased are we with the tiles that we would not change back for many times their additional cost. Yours very truly,

ROBERT H. CANFIELD.
Chairman Building Committee.

CLEVELAND, OHIO, April 20, 1899.—I am well satisfied with the tile and can recommend them as to their durability, good style, and keeping qualities to withstand the severe weather of winter. Yours truly,

OTTO I. LEISY.

CHICAGO, April 6, 1899.—I am very pleased to advise you that the flat tile furnished by your good people for roofing my house is entirely satisfactory, is very artistic, and in every way is a first-class piece of work. Yours truly,

JOHN FARSON.

CHICAGO, June 13, 1895.—The red tile roof put on my residence, No. 4800 Grand Boulevard, over a year ago, I like very much, and have found it entirely satisfactory. This tiling, I understand, was made by you. Respectfully,

R. N. BAYLIES.

ST. LOUIS, MO., July 25, 1896.—Your favor of the 21st inst. regarding the roof of Mr. Kauffman's house received.

Mr. Kauffman's house was not directly in the path of the recent tornado; however a great deal of damage was done in the neighborhood of Kauffman's and as Kauffman's roof was not entirely finished at the time we consider ourselves very lucky that the roof was left at all. We have had constant and severe storms for the past two months and not a single leak has developed. Regarding the weather qualities of your Conosera Tile we feel safe in saying they are entirely satisfactory. Kauffman's house was on the western edge of the northwest cloud; it is at the entrance of the Park and is the most prominent residence corner in our city. The roof since finished makes a grand appearance and will do you a world of good as an advertisement. When you consider that we were unable to get any plans for this work, that all measurements were taken from the building, that in a great many places it was impossible to get accurate measurements without going to great expense for scaffolding, etc., we feel that you will be gratified to hear that everything worked out nicely. Your respectfully,

HAYDEN SLATE CO.

CHICAGO, August 14, 1896.—In handing your check for balance due on your contract for roofing my residence with your Conosera Tile, I will state that I am highly pleased with my roof and also with your prompt and business-like fulfillment of the contract. I paid particular attention to this part of my house, believing that no part of it adds to or detracts from its appearance more than the roof; therefore I spent much time in investigating tiles of many shapes and makes. I adopted your Conosera for the following reasons: Its deep, rich, red color; its hardness; that quality about it which gives it its varied beauty from different points of view (I believe you call this mobility); and for the richness of your ridgings, crestings, finials, and especially for the beautiful effect of your graduated tiles for tower work. The quality of the work is such that the roof has not shown a single leak through all the violent rain-storms we have had since its completion. I repeat that I am highly pleased with it and my neighbors and others must also be, judging from the great number of compliments I get about it. This letter, as you know, is entirely unsolicited, but as few of us object to a mention of our merits, I trust that it will not be displeasing.

Yours truly,

WM. D. HOLLIS.